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This is the last pamphlet in Volume 101.

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Subject Digest

Allocation

Common Carrier Bureau clarifies certain sections of the Commission's *Allocation Order*, FCC 85-293 (released June 12, 1985); grants waivers to several local exchange companies to use modified procedures for determining the order of interexchange carriers on Equal Access ballots and for treatment of multi-line customers; and provides guidelines for resolving customer choice disputes and obtaining letters of agency.
—Access And Divestiture Tariffs
CC Docket No. 83-1145

Amateur Operator

By declaratory ruling, Commission announced a limited preemption of state and local regulations governing amateur installations. The Commission said that there is a strong federal interest in promoting amateur communications and that state and local regulations that preclude amateur communications are in direct conflict with federal objectives and must be preempted.
—Amateur Radio Preemption

Amateur Radio Service
(See: Amateur Operator-*Amateur Radio Preemption*)

Antenna, Structure
(See: Amateur Operator-*Amateur Radio Preemption*)

Antenna, Tower
(See: Amateur Operator-*Amateur Radio Preemption*)

Cellular Communications Systems

Initial Decision reversed, in favor of granting cellular nonwireline application where one applicant's proposed system covers more area and population than its opponent's. No other preferences were awarded.
—ICS/MCI/CMS
CC Docket No. 83-146

Common Carrier

Commission issued a Report and Order regarding the establishment of satellite systems which would provide international communications services and Memoranda Opinions, Orders and Authorizations of applications filed by International Satellite, Inc., Pan American

Satellite Corporation, and RCA Communications, Inc. The Commission also issues Memoranda Opinions and Orders regarding Cygnus Satellite Corporation.

—Cygnus Satellite Corp.

Commission issued a Report and Order regarding the establishment of satellite systems which would provide international communications services and Memoranda Opinions, Orders and Authorizations of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issues Memoranda Opinions and Orders regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.

—International Communications

CC Docket No. 84-1299

Commission issued a Report and Order regarding the establishment of satellite systems which would provide international communications services and Memoranda Opinions, Orders and Authorizations of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issues Memoranda Opinions and Orders regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.

—International Satellite, Inc.

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—Orion Satellite Corp.

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—Pan American Satellite Corp.

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—RCA American Communications, Inc.

Common Carrier, International
Report and Order adopted setting forth the Commission's guidelines for the distribution of circuits among North Atlantic cable and satellite facilities during the 1986-1991 period.
—N. Atlantic Telecommunications
CC Docket No. 79-184

Common Carrier, Rates, Charges
Order adopted finding the routing of all undesignated interLATA traffic to one particular interexchange carrier ("default") to be unreasonable and prescribing an allocation plan to be implemented in all future central office equal acces conversions.
—Access And Divestiture Tariff
CC Docket No. 83-1145, Phase I

Common Carrier Rates, Integration
Petitions for further reconsideration considered and partially granted, Flat-rate charges for non-premium access services eliminated and replaced with usage-based charges.
—MTS/WATS Market Structure
CC Docket No. 78-72

Common Carrier, Rate Structure, Inquiry
(See: Common Carrier Rates, Integration-*MTS/WATS Market Structure)*

Comparative Coverage Issue
No integration credit allowed to post-hearing merger applicant, since one merging applicant had not proposed any integration prior to merger. Media interests of limited partner considered as if held by general partner to prevent upgrading of limited partner's application. Cable TV and educational TV not considered under comparative signal coverage criterion.
—Daytona B/cing Co., Inc.
BC Docket No. 81-262

Comparative Criteria
(See: Cellular Communications Systems-*ICS/MCI/CMS*)

Comparative Hearing
(See: Cellular Communications Systems-*ICS/MCI/CMS*)

Comparative Issue, Contingent

Applicant that would bring first local transmission service to community of 752 is not entitled to dispositive Section 307(b) preference over applicant that would bring first competitive service to a community of 2627. Fully integrated applicant has dispositive integration preference over applicant credited with 25% full-time and 37.5% part-time integration credit, regardless of any qualitative enhancement factors.
—*Ruarch Associates*
MM Docket No. 83-843

Constitution First Amendment

Where religious entities failed to demonstrate their qualifications for reserved channels and applications were therefore dismissed, there was no abridgment of the fee exercise clause of the first amendment.
—*Way of the Cross of Utah, Inc.*

Data Transmission

Report and Order adopted amending the rules to authorize TV stations to operate data and other communications services on vertical blanking interval (VBI) of TV video signal. This action expands teletext authority provided in Docket 81-741, 48 FR 27054, to permit additional VBI Communications services such as data transmission, computer software delivery, and paging.
—*Amendment of Parts 2, 73, And 76*
MM Docket No. 84-168

Educational Institution

Application for review denied. Where applicants are not educational institutions, do not show how they would advance educational programs, and do not have governing boards representative of educational, cultural, and civic groups in the community, they are ineligible for a reserved frequency. Noncommercial educational organizations and institutions, even though religiously oriented, can apply for reserved broadcast channels if they make an appropriate showing as to their qualifications.
—*Way of the Cross of Utah, Inc.*

Educational Noncommercial TV Station, Eligibility

Despite recent changes in FCC Form 340 for noncommercial educational TV stations, new applicants will still be required to show that their governing boards are representative of educational, cultural, and civic groups in the community.

—*Way of the Cross of Utah, Inc.*

(See also: Educational Institution-*Way of the Cross of Utah, Inc.*)

Employment, Equal Employment Opportunity Rule

Petition for reconsideration of Texas Broadcast Renewals, FCC 84-494, released October 29, 1984, that imposed a short-term renewal, dismissed and denied. Licensee did not present any grounds to justify rescinding the EEO sanctions imposed in the original order.

—*S. Plains B/cing Co., Inc.*

Equipment Authorization

Notice of Proposed Rule Making adopted to establish rules for the operation of perimeter protection systems on TV channels 2 through 6. The perimeter protection system will operate on TV channels 2 through 6 and be limited to te same radiation limits as personal computing devices (Class B). The perimeter protection system will be used to prevent unauthorized exit or entry at penitentiaries, nuclear power plants, or other secure facilities.

—*Amendment of Part 15*

Gen Docket No. 85-231

FCC Forms

(See: Educational Noncommercial TV Station, Eligibility-*Way of the Cross of Utah, Inc.*)

Frequency, Equitable Distribution of under 307(b)

(See: Comparative Issue, Contingent-*Ruarch Associates*)

Interexchange Service

(See: Allocation-*Access and Divestiture Tariffs*)

International Satellite Systems

(See: Common Carrier-*Cygnus Satellite Corp.*)

(See also: Common Carrier-*International Communications*)

(See also: Common Carrier-*International Satellite, Inc.*)

(See also: Common Carrier-*Orion Satellite, Corp.*)

(See also: Common Carrier-*Pan American Satellite, Corp.*)

(See also: Common Carrier-*RCA American Communications, Inc.*)

Low Power Communication Devices
(See: Equipment Authorization-*Amendment of Part 15*)

Merger and Drop Out Cases
(See: Comparative Coverage Issue-*Daytona B/cing Co., Inc.*)

Mobile Radio Service, Cellular Applications
(See: Cellular Communications Systems-*ICS/MCI/CMS*)

Ownership and Management, Integration of
(See: Comparative Coverage Issue-*Daytona B/cing Co., Inc.*)
(See also: Comparative Issue, Contingent-*Ruarch Associates*)

Presubscription
(See: Allocation-*Access and Divestiture Tariffs*)

Radio Frequency Devices, Marketing
(See: Equipment Authorization-*Amendment of Part 15*)

Reconsideration, Petition for, Denial of
(See: Employment, Equal Employment Opportunity Rule-*S. Plains B/cing Co., Inc.*)

Tariff, Revision of
(See: Common Carrier, Rates, Charges-*Access and Divestiture Tariff*)

Transmission, First Local
(See: Comparative Issue, Contingent-*Ruarch Associates*)

Common Carrier, Rates, Charges
Tariff, Revision of

Order adopted finding the routing of all undesignated interLATA traffic to one particular interexchange carrier ("default") to be unreasonable and prescribing an allocation plan to be implemented in all future central office equal access conversions.
—*Access And Divestiture Tariffs*
CC Docket No. 83-1145, Phase I

FCC 85-293

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of Investigation of Access and Divestiture Related Tariffs	CC Docket No. 83-1145 Phase I

MEMORANDUM OPINION AND ORDER

Adopted: May 31, 1985; Released: June 12, 1985

BY THE COMMISSION:

I. Background

1. Pursuant to the Modification of Final Judgment,[1] the Bell Operating Companies (BOCs) were ordered to provide equal access[2] where technically feasible to their customers by September 1986. Equal access allows end users to access facilities of a designated interexchange carrier (IXC) by dialing "1" only. The end user has the additional capability of using other IXCs by dialing a five-digit access code (10XXX). Presubscription is the process that enables end users to select a primary IXC prior to a central office conversion to equal access. The District Court held that under the MFJ, the BOCs were permitted "to route to AT&T the calls of any customer who, by the time equal access is available, has failed to

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[1] United States v. American Tel. & Tel., 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom.* Maryland v. United States, 460 U.S. 1001 (1983) (MFJ).

[2] Equal access is defined as that which is "equal in type, quality, and price to that provided to AT&T and its affiliates." *Id.* at 227. Equal access has also been referred to as Feature Group D access, easy dialing and 1+ Service.

make a selection of an IXC either by predesignation or by dialing an access code."[3] The Court also found that the MFJ did not preclude a BOC "from employing either the allocation or the blocking option should it choose to do so."[4]

2. In the Commission's *ECA Tariff Order*,[5] we recognized that AT&T would enjoy a definite competitive advantage as the "default" carrier. We stated, however, that the MFJ requirements of BOC presubscription customer information and mandatory new subscriber presubscription "would mitigate and eventually eliminate AT&T's advantage without the inconvenience or expense of blocking or distributing calls by formula."[6] In order to give consumers a fair opportunity to evaluate competing carrier services during the equal access transition, we ordered that a subscriber be allowed to select an IXC without charge during the six-month period following the equal access conversion date.

3. As a result of the above decisions, most BOCs used the "default" procedure. The BOCs provided customers with presubscription information that told them of the opportunity to designate a primary IXC of their choice. The customers were also informed that they would have to make individual arrangements for service with the IXC. If no such arrangements were made, the customer was "defaulted" to AT&T. Northwestern Bell (NWB), however, decided not to default non-presubscribed customers to AT&T and, instead, devised a *pro rata* allocation plan.[7]

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[3] United States v. Western Electric, 578 F. Supp. 668, 676 (D.D.C. 1983). This process has been referred to as "default" to the American Telephone and Telegraph Company (AT&T). The lawfulness of the "default" scheme under the Communications Act was not before the Court.

[4] *Id.* at 676 n.39. Allocation is a method by which non-presubscribed customers are assigned to IXCs in the same proportion as the presubscribed customers. For example, if Carrier A obtained 40 percent of the presubscribed customers, Carrier B obtained 30 percent and Carrier C obtained 30 percent, they would receive those percentages of non-presubscribed customers. Call blocking is another alternative to default. Using this method, a caller, who has neither presubscribed nor dialed a five-digit access code and who attempts to make a 1+ long distance call, is referred to a recorded message that instructs him how to presubscribe or to use the five-digit access codes.

[5] Investigation of Access and Divestiture Related Tariffs, CC Docket No. 83-1145, Phase I, 97 FCC 2d 1082 (1984) (*ECA Tariff Order*).

[6] *Id.* at 13-8.

[7] This plan, accompanied by a letter from J.E. Blair, was filed with the Commission for informational purposes on February 28, 1985 (NWB Plan). The NWB Plan consists of a two-ballot procedure. A customer is notified of equal access conversion 90 days prior to its occurrence and given a ballot on which to indicate a preference for a primary IXC. Customers who fail to return their ballots to NWB are sent a second ballot giving them another opportunity to choose an IXC and indicating which IXC they will be assigned to if no selection is made. Customers not returning their second ballot are assigned to the designated carriers and allowed six months after the conversion date to select different carriers without charge. The allocation method employed by NWB is random with respect

4. During this proceeding, several parties petitioned the Commission to reconsider the "default" procedure because they considered the routing of all undesignated traffic to AT&T to be anticompetitive. In our *Order on Reconsideration*,[8] we found that the record was insufficient to determine whether it is reasonable to route all undesignated traffic to one particular IXC. We requested comment on this issue and on reasonable and workable alternative methods to "default" and how these methods could be implemented without undue inconvenience to end users.[9]

5. The majority of commenters[10] responded in favor of replacing the existing "default" procedure with a *pro rata* allocation plan. After careful consideration of the record and for the reasons discussed below, we are prescribing a uniform *pro rata* allocation plan that all local exchange carriers, as defined herein, must put into effect by the date established in this Order.[11]

II. Comments

6. All commenting parties agreed that the customer's ability to make an informed choice of an IXC was essential to a successful equal access presubscription process. The commenters unanimously called for improvement in customer information and education,[12] and most parties agreed that a non-exclusive balloting system was the best means of ensuring affirmative customer choice.[13]

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to customers. The percentage of non-presubscribed customers assigned to any carrier is based on actual presubscription figures.

[8] Investigation of Access and Divestiture Related Tariffs, CC Docket No. 83-1145, Phase I, FCC 85-69, 50 Fed. Reg. 9462 (Mar. 8, 1985) (*Order on Reconsideration*).

[9] *Id.* at para. 23.

[10] See Appendix A for a list of the 37 initial commenters and the 24 parties that replied. In addition to these comments, the Commission also received the following informal responses: 74 letters from citizens, a "default" auction proposal from a University of California - Los Angeles professor and letters from Congressman Edward Feighan of Ohio, Cincinnati Telecommunication for the Deaf, Inc., the City of New York Department of Consumer Affairs, and Sweeny-Old Ocean Telephone Company.

[11] See Appendix B for the actual text of the prescribed allocation plan. Paragraph 1 of this plan defines which carriers are responsible for implementation of this plan. *See also* para. 32, *infra*.

[12] Center/Checkbook stated that it was very difficult for customers to obtain the information necessary to make an informed choice of a primary IXC. It recommended that the BOCs be required to create an inexpensive way for customers to acquire objective comparative information on features and rates of long distance carriers.

[13] A non-exclusive balloting system allows a customer to designate his primary IXC either by ballot or by directly contacting the IXC for service. The BOCs and AT&T commented in favor of a non-exclusive balloting system. Each of the BOCs stated in its individual comments that it was either currently using a ballot system or in the process of converting to one.

7. Commenters[14] in favor of a *pro rata* allocation plan such as the one currently used by NWB argued that default was preserving AT&T's monopoly power over the marketplace and that an allocation plan was not only workable but was stimulating at least a 20 percent increase in customer participation in the presubscription process.[15] Parties attributed the low presubscription levels associated with default to customer inertia. These parties argued that the default procedure gives customers no incentive to make an affirmative response to the presubscription process and that AT&T is receiving an unwarranted windfall. Many parties found fault with the practice of informing customers that failing to respond to the presubscription notices would result in uninterrupted easy dialing service with their current long distance carrier.

8. In its comments, which are representative of those parties in favor of the prescription of an allocation method, DOJ gave four reasons why the Commission should adopt an allocation plan such as NWB's. First, NWB's experience has proved that a viable and reasonable alternative to default exists. Second, the MFJ does not prohibit the Commission from mandating an alternative to default as long as the implementation of equal access is not delayed. Third, a ballot and allocation plan such as NWB's is more consistent with the requirements of the Communications Act that a common carrier is forbidden "to make or give any undue or unreasonable preference or advantage to any particular person."[16] Fourth, DOJ has concluded from its review of statistics submitted by the RHCs that allocation is, in fact, cheaper to implement than the current default procedures.[17]

9. Although most commenting parties supported implementation of the NWB Plan and urged its adoption because it has been successfully

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[14] The commenters supporting the use of an allocation plan were: Allnet, Center/Checkbook, Comptel, Contel, DOJ, Empire, FPSC, GTE Sprint, Lexitel, MPSC, Microtel, MCI, MTN, NWB and PNB, NYNEX, RCI, SBS, Southland, SWBT TSI, Teltec/Satelco, TRAC, US Telecom, USTS and Western Union.

[15] DOJ is responsible for enforcing the MFJ and has exercised this responsibility by requiring the BOCs to file compliance plans with respect to equal access conversions. On February 8, 1985, it asked the Regional Holding Companies (RHCs) to provide equal access conversion data. *See* DOJ Comments at 8. After reviewing the statistics received, DOJ stated in its comment summary that 65 - 70 percent of NWB's customers have affirmatively chosen a primary IXC while less than 50 percent of the customers of the other BOCs have done so.

[16] 47 U.S.C. § 202(a). DOJ stated that default is preferential treatment of AT&T by the BOCs and that the BOCs cannot demonstrate that this discrimination is just and reasonable.

[17] This conclusion is based on the fact that NWB uses a computer tape to update the necessary systems rather than the more expensive service order process used by the other BOCs in implementing default.

tested, several parties[18] suggested modifications to this plan. Most of the proposed modifications related to the type of customers the IXCs would be assigned through the allocation process. These proposals included: (1) allocating only business customers, (2) allowing IXCs to check the creditworthiness of their assigned customers before acceptance of them, (3) allowing IXCs to reject certain assigned customers for any reason, (4) allocating only customers that had a specified level of monthly toll bills, (5) allowing IXCs to limit the number of allocated customers they will accept, and (6) requiring the local exchange company (LEC) to provide specific end user inter-LATA traffic data to the IXC without additional charge.[19]

10. MCI urged the Commission to require the allocation procedure to take place after the conversion date instead of after the return of initial ballots as provided in NWB's Plan, in order to provide customers 90 days to determine their choice of carrier and to return their initial ballots. MCI stated that the allocation percentages would be more representative of customer choice if this extended period of time for the return of the initial ballot were given. For similar reasons, SBS, RCI and USTS also requested that customers be notified of the availability of equal access 120 days prior to the equal access conversion date rather than the 90-day period used by NWB. Contel suggested that a three-month rather than six-month period for non-presubscribed customers to select a primary IXC free of charge would reduce the industry's administrative burden. The City of New York Department of Consumer Affairs advocated that ballots contain a choice for no primary interexchange carrier which would indicate that the customer is opting to make all long distance calls by using a 10XXX access code. MCI also argued in favor of an allocation plan for public phones.

11. RCI argued that "equal" allocation of default traffic was preferable to an NWB-type allocation based on relative percentage of presubscribed customers. Allnet, GTE Sprint, Microtel, MCI and SWBT argued in favor of "retroactive" allocation where all non-presubscribed customers in equal access conversions prior to an allocation plan effective date should be recontacted and subject to a ballot and allocation process. Allnet proposed an alternative to "retroactive" allocation which would reduce all future allocations to AT&T by the percentage of end offices that had already converted prior to the implementation of an allocation plan.

12. Parties in favor of an allocation plan disagreed as to how the Commission should implement such a plan. Contel and Pacific stated that

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[18] These parties were: Allnet, Center/Checkbook, Contel, Lexitel, MPSC, MCI, RCI, SBS, Southland, Teltec/Satelco, US Telecom, and USTS.

[19] NYNEX urged the Commission to reject the commenters' proposed modifications to the NWB Plan because they are not in the public interest.

the Commission should adopt general guidelines requiring allocation rather than rigidly applied rules. NYNEX, BellSouth and GTE Sprint argued that because there were several forms of allocation plans being proposed by various LECs, the Commission should specifically define the allocation mechanisms to be used. MTN, NWB and PNB replied that the NWB Plan should not be adopted nationally because it was formulated to respond to the marketplace and that carriers need continued flexibility in order to adapt an allocation plan to changing market conditions. California, Pacific, SNET and USTA stated that the default issue should be decided at the state level with input from the LECs.

13. Most commenters that argued against allocation argued that it would cause undue customer inconvenience and confusion, and considered allocation an unnecessarily coercive and drastic measure.[20] Parties opposed to an allocation plan cited default as the most reasonable alternative because of its cost efficiency. AT&T argued that default is neither an unreasonable practice nor discriminatory. AT&T cited the MFJ as the basis for this conclusion and stated: "As a matter of law and of fact, the customers involved here are already AT&T's customers, and were intended under the Decree to remain so until they select another company as their primary interexchange carrier."[21]

14. AT&T further argued that the current default system was working well and that it should remain in place. Based on independent survey data,[22] AT&T provided the following conclusions. First, customers overwhelmingly understand the presubscription process and are aware of the selection they are being asked to make. Second, customers understand that if they do not make a selection and notify another interexchange carrier, they will continue to have service provided by AT&T. Finally, customers in both allocation and non-allocation areas overwhelmingly prefer that undesignated traffic be routed to AT&T rather than allocated among the IXCs.

15. NARUC argued against allocation, believing that it disadvantaged new entrants in the interexchange market that are in the process of developing a customer base. DOD was opposed to the implementation of the allocation process because of its interpretation that the Competition in Contracting Act requires that it not permit contracts with a new carrier on an allocated basis. Rochester argued against the prescription of allocation for small rural independent telephone companies because it would significantly increase costs and administrative responsibilities.

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[20] The majority of citizen letters received by the Commission argued against a LEC making a primary long distance carrier choice for them.

[21] AT&T Comments at 4.

[22] See Presubscription Market Study prepared by Marketing Viewpoints, Inc., a national market research organization, which AT&T filed with its comments.

16. Alternatives to default and the allocation process were also suggested by commenting parties. The auctioning of the non-presubscribed customers to the highest IXC bidder together with the IXC's ability to resell these customers in a secondary market was suggested by Lexitel, MPSC and a U.C.L.A. professor. These parties believed that auctioning was the best alternative because it encouraged competition among IXCs and allowed the marketplace to determine which IXC was most capable of serving these customers. Parties opposing the auction method stated that this procedure would result in unnecessary customer confusion and high costs. FPSC stated that the cost of implementing an auction would be likely to exceed any revenue generated by the winning bid.

17. Lexitel, SBS, TSI, TRAC and Center/Checkbook argued in favor of call blocking as a viable alternative to default. They stated that call blocking is the most equitable way of administering the presubscription process because this method prohibits customers who have not preselected easy dialing carriers from making any 1+ long distance calls. Customers attempting to make such calls receive a recording that instructs them to dial a five-digit access code of the IXC they wish to use. The recording also suggests that the customer call the LEC Business Office to arrange for a primary IXC. Several parties opposed this method because it is too costly to implement and could cause extreme confusion and inconvenience to the customers. USTA argued that call blocking would indiscriminately block emergency calls or calls from disabled customers. Parties alleged also that this method would put a substantial burden on the LECs since they would most likely be contacted with customer complaints.[23]

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[23] GTE Sprint filed a request for enlargement of issues in response to our request for comments on the default issue. GTE Sprint and other IXCs commented that the implementation of equal access and the transition of long distance service from a protected monopoly to a fully competitive marketplace required modification of Commission policies. The other interexchange carriers were Allnet, Comptel, Lexitel, MCI, SBS, Teltec/Satelco, US Telecom, USTS, and Western Union. MPSC also addressed these other equal access issues and requested the Commission to ascertain the IXCs' ability to absorb allocated traffic and to compete without the 55 percent access charge discount.

Since we specifically focused our request for comments on the default issue, the extraneous issues raised by GTE Sprint will not be considered here. Furthermore, these issues do not appear to be within the scope of this proceeding. CC Docket No. 83-1145 is an investigation of the lawfulness of the filed access tariffs and their compliance with our access charge rules. Proposals to change or reconsider those rules should be submitted in a new rulemaking petition. We, therefore, deny GTE Sprint's request for enlargement of issues.

In addition, the following issues raised by KPSC, Rochester and SNET will not be considered in this Order. KPSC advocated that the Commission consider the proper level

III. Discussion

18. In our *Order on Reconsideration,* we stated that "the practice of routing all default traffic to AT&T can only be justified by a strong showing of necessity" and that "if, in fact, *pro rata* plans for distributing default traffic can be implemented without undue customer inconvenience, then the basis for the *ECA Tariff Order*'s determination in this matter is seriously undermined."[24] After reviewing the comments and the results of the NWB Plan implementation, we find that routing of all default traffic to AT&T cannot be justified by a strong showing of necessity. We believe our prior concerns that an allocation plan would cause undue customer burden and confusion have been dispelled by NWB's experience with its allocation plan. Customer participation under the NWB Plan is significantly greater than under the other BOC default plans. There have been no complaints to the NWB area Public Service Commissions or to the company itself that the process is burdensome.[25] For the reasons discussed below, we find the current default procedure to be unreasonable. We are prescribing an allocation plan that is effective May 31, 1985.[26]

19. Although the District Court permitted the routing of undesignated long distance traffic to one IXC, it clearly refrained from making this procedure mandatory.[27] In addition, the Court did not find any basis in the decree to preclude any LEC "from employing either the allocation or blocking option should it choose to do so."[28] The Court's main reservations

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of service charge for changing a predesignated carrier. We believe that this issue was sufficiently dealt with in the *ECA Tariff Order*. The Phase III Order of the *MTS and WATS Market Structure Inquiry,* CC Docket No. 78-72 has addressed Rochester's concerns about implementation of equal access by the Independent Telephone Companies. SNET requested that the default decision recognize and resolve certain equal access and network reconfiguration (EANR) cost issues for Independents. These issues are being considered in the EANR Investigation, CC Docket No. 85-93, and by the Federal-State Joint Board in CC Docket No. 80-286.

[24] *Order on Reconsideration* at para. 22.

[25] See Letter from J.E. Blair at 2, n.7, *supra*. In addition, none of the citizen letters against allocation received by the Commission were from NWB customers. See n.20, *supra*. Most of the citizens were concerned about their choice of long distance carrier being taken from them. The NWB Plan and the plan we are prescribing today provide several opportunities for customers to choose a carrier. Customers can avoid the allocation process by affirmatively selecting a primary IXC.

[26] The allocation plan requirements and the designation of affected carriers are described in this Order at paras. 31-37, *infra*. The complete plan is contained in Appendix B.

[27] See n.3, *supra*.

[28] United States v. Western Electric, 518 F. Supp. at 676 n.39. The Court also cited the Department of Justice Response which stated: "The Department of Justice has concluded that nothing in the decree prohibits an Operating Company from requiring predesignation or impairs the appropriate regulatory body from imposing such a requirement (Response of United States at 2)."

about the prescription of an allocation plan were whether such a plan could be implemented fairly and without undue customer inconvenience and confusion.

20. With the experience gained from implementation of the NWB plan, we believe that the Court's concerns have not been realized. NWB has encouraged competition in its area and has provided customers with an opportunity to make an affirmative and informed choice of a primary IXC. In contrast, the other BOCs that have implemented the default procedure by sending only a notice of equal access conversion have provided their customers with no incentive to take advantage of a competitive market. Customers have been told that they do not need to take any action to retain easy dialing. Default, in fact, has allowed the BOCs to give AT&T a distinct and artificial advantage that is unwarranted. By allowing customers to default to one IXC, the BOCs are appearing to endorse one IXC as the best choice.[29] In addition, default gives AT&T a powerful incentive to dissuade customers from affirmatively exercising their right to select a primary IXC.

21. NWB's method of conveying information, providing ballots and notifying customers of allocation in the event of no IXC selection, encouraged more than double the percentage of customers (60 to 70 percent versus 30 percent) to make an affirmative choice of an IXC compared with the rest of the BOCs. This increased customer participation, together with the lack of customer complaints, demonstrates that an allocation plan can promote the goals of the MFJ and competition without any of the drawbacks cited by the Court. DOJ which supported the Court's conclusion at the time, is now advocating that the Commission require all BOCs to employ a ballot and allocation process.[30] In its comments, DOJ stated:

> In our opinion, a ballot/allocation procedure is more consistent with protecting the competitive process than default, which automatically assigns customers to only one competitor. By increasing the incentives of all ICs to provide helpful information to consumers, thereby facilitating the ability of customers to make rational, informed choices among the ICs, a ballot/allocation system promotes efficient functioning of the market.[31]

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[29] We cannot agree with NARUC's argument that new competitors would be disadvantaged by allocation. On the contrary, new competitors by appearing on the ballot and participating in allocation, have a better chance to persuade customers to try their service than they would under the default procedure.

[30] DOJ's only proviso to this recommendation was that the implementation of an allocation process must not have an adverse impact on the BOCs' ability to meet their obligations under the MFJ.

[31] DOJ Comments at 20-21.

22. We also find under Sections 201(b) and 202(a) of the Communications Act, 47 U.S.C. §§ 201(b), 202(a),[32] that "default" is an unreasonable and discriminatory practice. The BOCs through their tariffs automatically presubscribe a customer to AT&T and only change that presubscription to another carrier upon request of the customer. As a result of this "default" procedure, AT&T's customers may acquire its services by doing nothing. The other IXCs must, however, aggressively advertise in order to get their potential customers to take an affirmative action and select an IXC. This practice clearly accords AT&T preferential treatment and gives it an advantage over its competitors. The marketing advantage that AT&T enjoys is not predicated on any quality or pricing difference but rather on its historical monopoly position. "Default" is, therefore, unreasonable and contrary to the public interest because it favors one carrier over others without a justified showing of necessity and denies the public the benefits of competition.

23. Since the BOCs charge all IXCs the same amount for Feature Group D access, this "default" practice is also discriminatory. Through this procedure, only AT&T obtains the benefit of receiving all undesignated traffic. The amount of this traffic is not insignificant. We have noted that as many as 70 percent of a central office's customers may be undesignated at the time of cutover. See para. 21, *supra*. Under Section 202(a), 47 U.S.C. § 202(a), this discrimination is only permissible if the BOCs can demonstrate that it is just and reasonable. The BOCs have argued that "default" should remain because other alternatives presents undue inconvenience and confusion to the customer and are more costly. The implementation of the NWB Plan has provided sufficient evidence that a viable alternative to default exists. NWB's experience considerably weakens any arguments of undue customer inconvenience or confusion. As discussed in para. 24, *infra*, the BOCs are also not able to justify "default" on the basis of cost efficiency. The BOCs, therefore, have not met the burden of justifying why discrimination in favor of AT&T through the "default" process is reasonable and should be allowed to continue. We conclude that "default" of undesignated traffic to AT&T is unreasonable and under Section 201(a) of the Communications Act, 47 U.S.C. § 201(a), the Commission is exercising its authority to prescribe

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[32] Section 201(b), 47 U.S.C. § 201(b), provides that "any such charge, practice, classification, or regulation that is unjust or unreasonable is hereby declared to be unlawful." Section 202(a), 47 U.S.C. § 202(a), states that "it shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person."

presubscription procedures that will better serve the public interest.[33]

24. One of the main contentions of the commenting parties against allocation is that this plan is not cost efficient and is much more expensive to implement than default.[34] This argument has been disproved also by NWB's experience. NWB has estimated the cost of its ballot and allocation procedure, including the mailings, tabulation of ballots and orders, allocation of non-presubscribed lines and switching machine updates, to be $.75 a line. This process avoids the need for service orders which are priced substantially higher (approximately $5-6 per order). This service order cost is in addition to the cost of mailing, printing and preparing the customer notifications. We agree with DOJ, therefore, that the costs of allocation are not prohibitive and, in fact, make the allocation process a more viable alternative.[35]

25. We agree with the commenters that requested detailed guidelines for the allocation process. Because of the short time in which the majority of the remaining equal access conversions are to take place and because several carriers have proposed different allocation plans and modifications to the existing NWB Plan, we are requiring all carriers to follow our specific guidelines so that allocation will be implemented uniformly on a fair, reasonable and timely basis across the Nation. The modifications suggested by the commenters are untested and in many cases circumvent important aspects of the plan.[36] Limiting the IXC acceptance of allocated customers would allow some carriers to choose only attractive customers while other carriers would be allotted a greater portion of less attractive customers. In addition, IXCs who have agreed to participate in the allocation process have an obligation as common carriers to serve all customers allocated to them. Removing some or all of the eligibility criteria for IXCs would also be detrimental to customers because substantially equivalent service could not be assured. For these reasons and in order to ensure timely implementation of this Plan, we are not incorporating (with one exception discussed below) the proposed modifications to NWB Plan.[37]

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[33] For the same reasons, we find that "default" to a non-AT&T IXC is equally unreasonable. In an informal letter to the Commission, Sweeny-Old Ocean Telephone Company proposed "default" to a non-dominant IXC that would agree to provide a centrally located tandem switch for the implementation of equal access service for small independent telephone companies. This proposal will not be adopted.

[34] These parties did not provide data to substantiate their allegations that default was less costly than allocation.

[35] See DOJ Comments at 13-14.

[36] See paras. 9-10, *supra*, for a description of proposed modifications.

[37] The proposed modifications to the allocation plan that we are not adopting include Contel's three-month free charge period, the City of New York Department of Consumer Affairs' proposal for a "no primary IXC" ballot selection and MCI's proposal for allocation of public phones. We found that three months is not adequate time for

26. The modification that we are adopting to the allocation plan pertains to the time period allowed for customer selection on the initial ballot. Several carriers requested that 30 days be added to the conversion schedule and MCI requested that allocation take place after the conversion date which would allow over 60 days for customer review of the initial ballot. See para. 10, *supra*. We will permit flexibility in this area of customer review of the initial ballot as long as it does not interfere with or delay the equal access conversion schedule. These time periods may be extended according to the following parameters. The LECs may send a second ballot with the allocated IXC designation to their customers as early as 40 days prior to the conversion date but no later than 90 days after that date.

27. Alternatives to allocation such as call blocking and auctions may not be substituted for the allocation process. We believe that call blocking, while theoretically the most equitable solution for treatment of non-presubscribed customers, is too costly, represents an administrative burden to the carriers, would require a lengthy implementation period and would cause the most confusion and inconvenience to customers.[38] For the same reasons, the planning and implementation of an auction of default customers is not an acceptable alternative to the prescribed allocation plan.

28. The argument that non-presubscribed customers should be allocated to all IXCs equally is without merit. There is no rationale for allowing IXCs a larger portion of customers than what they acquired through their own marketing efforts. To avoid customer confusion, unnecessary administrative burdens and expense, retroactive allocation will not be ordered for conversions prior to the effective date of this Order. In the *ECA Tariff Order*, we allowed the BOCs to route all undesignated traffic to one particular IXC. We are, therefore, aware that customers participating in equal access conversions prior to May 31, 1985 were given AT&T as their IXC at the time of those conversions pursuant to the Court's ruling.[39] Equal access conversions taking place after May 31, 1985 will differ because customers will now have the capability of making an informed choice and have no IXC until they either select one or are allocated to one. We have rejected the notion that passive customers "belong" to a particular IXC on the date of equal access conversion. Those customers already assigned under plans which we have permitted to be effective do,

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customer evaluation of competing long distance services in the *ECA Tariff Order*, see n.5, *supra*. The "no primary IXC" option is similar to a call blocking feature which we find to be too burdensome. See para.27, *infra*. Public phone allocation may be determined on a local basis. See Appendix B, Section 24 of the allocation plan.

[38] This decision does not affect the use of call blocking for new customers.

[39] See n. 3, *supra*.

however, have an "equal access relationship" with an IXC. In light of our previous decision, we believe that ordering retroactive allocation would be unfair and disruptive to those customers that now have an IXC because of "default". One-time balloting of customers previously defaulted to AT&T will be required, however, in order to ensure that these customers have a meaningful opportunity to make a selection among qualifying IXCs under a balloting procedure. We believe this balloting opportunity is essential both for reasoned consumer choice and for equity purposes. See para. 34, *infra*.

29. In order to assure uniform implementation of and compliance with the allocation plan, we are requiring that interstate access tariffs be revised to reflect the incorporation of this plan into the presubscription process. LECs must expand the current presubscription material located in their access tariffs to include the requirements of the allocation plan and its effects on the presubscription charges.[40] These revisions do not need to be in great detail. An outline of the information required is contained in the Ordering clause in para. 40, *infra*. In addition, the LECs must reference this Order and specifically Appendix B in the presubscription section of their tariff. The tariff must also state that this Order with all Appendices will be available for inspection in the Public Reference Room of the Tariff Division at the main building of the Commission and that it can also be obtained from the Commission's commercial contractor.

30. Finally, we agree with all commenting parties that improvement of customer education and information on the equal access presubscription process is of paramount importance. Each LEC and IXC should strive to develop clear and detailed information that promotes increased customer participation in the selection of a primary IXC.[41] For example, NWB is using question and answer brochures and providing an 800 number for customer questions in addition to its regular presubscription process information.[42] In addition, we are requiring in the second ballot mailing that the LECs include a detailed explanation of how allocation percentages and random customer assignments will be determined. By maximizing the customer's ability to make an informed choice, the regulatory intrusion of an allocation plan is decreased proportionately.

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[40] For most LECs, this information is contained in Section 13 of their tariffs.

[41] The "700" service issue asserted by Empire is not totally resolved by the institution of a mandatory allocation process. See Empire Comments at 2-5 for a discussion of this problem. Allocated customers will receive their respective IXC recordings which may indicate that they chose that IXC. AT&T will no longer be the only carrier to have this "advantage." The LECs may want to restrict these recordings to identification of the carrier only.

[42] *See* Appendix C for these examples.

IV. Allocation Plan Requirements

31. The Commission has created an allocation plan that is modeled after the NWB Plan.[43] We have modified this plan to allow some implementation flexibility for the participating carriers.[44] For example, LECs may determine how many ballots are to be sent to their customers, whether the initial ballot will be sent out earlier than 90 days prior to conversion and whether allocation will take place prior to or after the equal access conversion date. We do require, however, that all carriers adhere to the fundamental plan requirements without deviation. Any carrier that finds itself unable to comply with one or more provisions of this plan or believes the goals of this Order can be served equally well by a modified approach must file a petition for waiver with the Commission.

32. Carriers that must implement this allocation plan are the BOCs subject to the MFJ,[45] GTE Corporation (GTE) pursuant to its Consent Decree,[46] Independent Telephone Companies pursuant to the Commission's *Phase III Order*[47] and any local exchange company that provides equal access on a voluntary basis. These carriers are required to inform the IXCs of all local procedures and schedules.

33. The implementation of this Plan should take place as soon as possible in order to promote affirmative customer choice for the remaining period of the equal access conversions. Carriers are required to implement fully the allocation plan on a retroactive basis for all conversions that take place on or after the effective date of this Order, May 31, 1985. Because a large number of equal access conversions will take place between June and December of 1985, we believe it is important to implement the allocation plan as soon as possible. We are aware that some LECs will not be able to implement this plan immediately. We do not believe, however, that the allocation of nonpresubscribed customers after

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[43] *See* Appendix B for the text of the Commission prescribed allocation plan.

[44] *See* Appendix C for examples of NWB material formats. Since these formats have proved to be workable and reasonable, plan participants are encouraged to follow these examples as closely as possible.

[45] See n.1, *supra*.

[46] United States v. GTE Corp., Civ. Action No. 83-1298 (D.D.C., *slip op.* Dec. 13, 1984) (Proposed Final Judgment). Pursuant to the Court's approval of this Proposed Final Judgment, GTE and the DOJ entered into a Consent Decree on December 21, 1984 which contained a phased-in implementation timetable for the provision of non-discriminatory equal access to interstate communications facilities by the subscribers of the GTE operating companies.

[47] MTS and WATS Market Structure Phase III, CC Docket No. 78-72, FCC 85-98, released Mar. 19, 1985 (*Phase III Order*). In this decision, the Commission extended equal access interconnection obligations to the Independent Telephone Companies recognizing certain limitations. These companies generally must provide equal access in their stored program control switching offices within three years of the receipt of a reasonable request for equal access in the area served by such facilities from any IXC.

May 31, 1985 will cause any disruption to customers because they will be aware of the change in equal access conversion procedure and relatively few customers will be affected by this provision. To minimize any disruption to these customers, the affected LECs should inform these customers of their pending allocation and implement the allocation plan as quickly as possible so the fewest number of customers possible will be affected. LECs are permitted to continue to route calls of nonpresubscribed customers to AT&T during the transition period that occurs when an equal access conversion takes place after May 31, 1985 but prior to the implementation of the LEC's allocation plan.

34. For equal access conversions that have taken place prior to May 31, 1985, the carriers are responsible for sending a ballot to all non-presubscribed customers. The LEC should determine which customers have not presubscribed a short time before this balloting procedure is to take place. Customers who selected an IXC after their equal access conversion date but prior to the specified ballot date should not receive a ballot. This ballot will allow these customers an opportunity to make an affirmative selection of a primary IXC. If these customers do not return this ballot, the LEC is not required to send them a second ballot, and they may remain with their current long distance carrier. LECs should begin this retroactive balloting procedure within 90 days of the effective date of this Order and complete this process for all affected central offices no later than June 1, 1986.

35. The allocation plan consists of a two-ballot procedure whereby the customer is given two opportunities to select a carrier before being assigned to an IXC by the LEC.[48] The IXC must affirmatively notify the LEC of its intention to participate in the allocation process and the IXC must meet certain criteria to be eligible for participation. By requiring that these criteria be met by the IXCs, we are by no means returning to more stringent regulation of the IXCs designated as "forborne" under the Competitive Carrier Rulemaking, CC Docket No. 79-252. These eligibility criteria protect the non-presubscribed customers by ensuring them service that is substantially equivalent to their existing service. IXCs are voluntarily submitting to these eligibility requirements when they agree to participate in the allocation process.

36. The LEC must notify customers by an initial ballot and letter that equal access will be available to them approximately 90 days prior to the conversion date. The customer is instructed that he has 30 days to return the ballot with his primary IXC designated. The customer may also make direct service arrangements with the IXC. The IXC provides a list of customers that have directly contacted it to the LEC by the initial ballot

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[48] A minimum of two ballots is required. The LECs may opt to provide customers with additional ballot opportunities to select an IXC.

deadline. The LEC processes the customers that have designated a primary IXC and determines which customers have not exercised their choice of IXC.[49] If a discrepancy occurs between a customer ballot and an IXC customer list, the ballot shall take precedence unless direct customer contact initiated by the LEC resolves this conflict.

37. Allocation takes place by determining the results of the initial balloting process and assigning non-presubscribed customers randomly to the IXCs in the same proportion as the presubscribed customers. We have granted the LECs flexibility regarding the point at which this allocation may be made. See para. 26, *supra*. If customers do not return their initial ballots, they receive a second ballot indicating that they will be assigned to the IXC specified if they do not return the ballot by the due date. If customers return the second ballot, their selection is processed accordingly. Customers who do not return the second ballot by the specified due date will be connected to the IXC indicated on that ballot effective with the equal access conversion. Allocated customers have six months after the equal access conversion date to change to an IXC of their choice without charge. The LEC must process all customer ballots and carrier lists that are received 20 days prior to the conversion. LECs are urged to process customer ballots as close to the conversion date as possible. This capability will depend on the degree of sophistication of the allocation system used.

V. Conclusion; Ordering Clauses

38. We believe that our decision today to prescribe an allocation plan that increases consumer awareness of the presubscription process and the available range of service and carrier choices is beneficial to the public interest. This plan gives the IXCs added incentive to offer new and competitive services as a means of affirmatively attracting presubscriptions. The most important aspect of this plan is that customers will be better able to exercise their right to choose a primary long distance carrier.

39. Accordingly, IT IS ORDERED pursuant to Section 205 of the Communications Act, 47 U.S.C. § 205, that all local exchange carriers as defined herein must put into effect immediately the allocation plan prescribed by the Commission in Appendix B of this Order.

40. IT IS FURTHER ORDERED that the interstate access tariffs of the local exchange carriers must be revised to reflect the allocation plan within 15 days of the release date of this Order on 30 days' notice. These revisions must include language providing for (1) end user notification and

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[49] All customers must select an IXC for 1+ dialing including those customers that are currently signed up with IXCs that now require them to dial additional digits prior to dialing the long distance telephone number.

non-exclusive balloting procedure, (2) allocation process, (3) interexchange carrier customer lists, (4) customer choice discrepancy, (5) retroactive balloting procedure, and (6) presubscription charge application.

41. IT IS FURTHER ORDERED that Sections 61.58 and 61.74 of the Commission's Rules, 47 C.F.R. §§ 61.58, 61.74 are waived for the purposes of implementing this Order.

42. IT IS FURTHER ORDERED that this Order is effective upon adoption.[50]

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

*Appendices A&C may be seen in FCC's Dockets Branch, 1919 M Street, N.W., Wash., D.C. 20554.

Appendix B

ALLOCATION PLAN

1. *Application.* This Plan must be put into effect by all companies implementing equal access which include: Bell Operating Companies pursuant to the Modification of Final Judgment,[1] GTE pursuant to its Consent Decree,[2] Independent Companies pursuant to Commission Order[3] and all local exchange companies that provide equal access on a voluntary basis. These companies will be referred to as local exchange companies (LECs) throughout this Plan. The carriers participating in the equal access process and providing long distance service to customers will be referred to as interexchange companies (IXCs).

2. *Effective Date and Retroactivity Requirement.* The effective date of this Allocation Plan is May 31, 1985. The affected LECs are obligated to carry out this Plan for all customers that are subject to equal access conversions on or after May 31, 1985. For those customers

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[50] The Commission finds that, because the prescription of an allocation plan relieves restrictions on competition and represents a statement of policy and because a great number of equal access conversions are scheduled to take place in the immediate future, the public will benefit from putting this plan into effect without delay. An immediate effective date is, therefore, in the public interest and has good cause pursuant to 5 U.S.C. § 553(d).

[1] United States v. American Tel. & Tel., 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom.* Maryland v. United States, 460 U.S. 1001 (1983).

[2] United States v. GTE Corp., Civ. Action No. 83-1298 (D.D.C., Dec. 13, 1984) (Proposed Final Judgment). Pursuant to the Court's approval of this Proposed Final Judgment, GTE and the Department of Justice entered into a Consent Decree on December 21, 1984 which contained a phased-in implementation timetable for the provision of non-discriminatory equal access to interstate communications facilities by the subscribers of the GTE Operating Companies.

[3] MTS and WATS Market Structure, Phase III, CC Docket No. 78-72, FCC 85-98, released Mar. 19, 1985. In this decision, the Commission extended equal access interconnection obligations to the Independent Telephone Companies recognizing certain limitations. The Independent Telephone Companies include Cincinnati Bell and Southern New England Telephone Company.

subject to equal access conversions that take place from May 31, 1985 until the time that the LEC has its allocation procedure in place, the carrier is responsible for contacting those customers on a retroactive basis according to the provisions of this Plan. For those conversions taking place prior to May 31, 1985, the carriers are required to contact all non-presubscribed customers on a one-time ballot basis pursuant to the retroactive ballot procedures set forth in paragraph 25 *infra*.

3. *Plan Implementation.* The Allocation Plan must be implemented according to the specific provisions contained herein. If for any reason the LEC cannot implement this Plan as it is prescribed, the LEC must file an application for waiver with the Commission. The LECs and IXCs have been given flexibility to create their own systems and materials to effectuate this Plan. Examples of material formats used by Northwestern Bell (NWB) have been provided in Appendix C. Since these formats have proved to be workable and reasonable, Plan participants are encouraged to follow these examples as closely as possible.

4. *Presubscription Procedure.* Presubscription is the process by which end user customers may select (prior to a central office conversion to equal access) one primary interexchange carrier, from among several available carriers, to carry their "1+" interLATA long distance calls. Customers must be informed of the options available to them at least 90 days prior to their central office's equal access conversion date.[4] Customers are allowed one free selection of an IXC up to six months after their central office converts to equal access.

5. *End User Notification and Equal Access Balloting Process.* The LEC must notify end user customers of the availability of equal access in their particular area through the mailing of an Equal Access Ballot. This ballot will include the names of all the IXCs wishing to participate in the presubscription process and will be one means for customers to make their carrier selection known to the LEC. (See Letter of Agency Procedure, paras. 9-11, *infra.*) Using the ballot, a customer may either select a primary IXC for all of its lines, or it may choose a different carrier for each of its lines. Only one carrier may be selected for each particular line. In the case of a multi-line hunt group, a customer may select only one carrier through the ballot process. Customers should be able to make special arrangements to split the multi-line hunt group terminals among several IXCs by contacting their LEC Business Office.

6. Mailing of the ballots for each office will occur approximately 90 days prior to the central office conversion date. LECs may cluster central office conversions and consolidate mailing dates according to the first central office conversion in the cluster. LECs may also stagger the mailing of ballots over a number of days for practical purposes but, in no case, may ballots be mailed out later than 85 days prior to the conversion date.

7. The LECs must devise a method to give IXCs an equal opportunity to appear first on the Equal Access Ballot. Methods to ensure an equitable order of placement of IXCs on the ballot may include: a random change in the order of IXCs on an equal percentage of the ballots or an alphabetical listing of the IXCs that is rotated the number of times equal to the number of participating IXCs on a corresponding percentage of the ballots.

8. *Initial Ballot.* The initial ballot must contain the following information:

8.1. Caption: Equal Access Ballot.

8.2. LEC Name and Customer's Name, Address and Telephone Number.

8.3. Instructions for use of the ballot.

8.4. Option One which allows customer to indicate one carrier for all lines.

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[4] This 90-day period was ordered pursuant to Investigation of Access and Divestiture Related Tariffs, CC Docket No. 83-1145, Phase I, 49 Fed. Reg. 9174 (Mar. 12, 1984).

8.5. Option Two which allows customer to indicate a different carrier for each line.

8.6. List of IXCs appropriately identified and their business and residence customer contact numbers.

8.7. Equal access conversion date.

8.8. Ballot due date.

8.9. Signature and date line for customer's use.

8.10. Address where ballot should be mailed.

This initial ballot must be accompanied by a cover letter explaining presubscription and a self-addressed envelope. The cover letter should clearly inform the customer of all options in the presubscription process. See Appendix C for examples of an Equal Access Ballot and the accompanying letter. Customers should be asked to return the initial ballots within 30 days of their receipt. Although customer ballots will be accepted after this 30 day period, this initial deadline determines when the allocation percentages can be calculated. The LECs should make arrangements for the forwarding of any ballots that are mailed to a LEC location other than the one designated on the return envelope. For example, if the LEC has designated an outside vendor to tabulate the ballots and ballots are mistakenly sent to the LEC Business Office or included in customer bill payments, the LEC should immediately forward these ballots to the proper location.

9. *Letter of Agency Procedure.* A customer has the option of independently contacting the IXC to make arrangements for long distance service. Since ballots contain all of the customer's lines, the IXC should encourage its customers to mail the IXC the ballots or mail them to the LEC. The return of the ballots will ensure the accuracy of the selection process for all customer lines and multi-line hunt groups.

10. All IXCs may seek customer commitments to use their services and designate them as their primary IXC. All such commitments must be supported by a statement signed by the customer, which at a minimum recognizes these conditions:

10.1. The customer designates the IXC to act as the customer's agent for the presubscription process.

10.2. The customer understands that only one IXC may be designated as the customer's primary IXC for any one telephone number and that selection of multiple carriers will invalidate all such selections.

10.3. The customer understands that any primary IXC selection after the initial one will involve a charge to the customer.

10.4. The specific telephone number(s) for which the primary IXC is being designated must be listed.

11. Any IXC providing the LEC with a list of customers (see para. 12, *infra*) who have selected that IXC as their primary carrier must accompany it by a document affirming that the IXC does, in fact, have signed letters of agency that comply with the conditions cited in para. 10, *supra*, or a ballot for each customer on the list. This list and accompanying document are due on or before the specified date indicated on the LEC schedule. The IXC must also agree to accept responsibility for any billing disputes arising from implementation of its customer list. All written documentation must be made available to the LEC in the event of a dispute. See Appendix C for an example of the letter NWB uses for these purposes.

12. *Interexchange Carrier Lists.* The LEC must accept IXC lists of customers that have made individual arrangements with a specific IXC to designate that IXC as their primary long distance carrier. To be included in the office conversion, all carrier lists must be provided to

the LEC no later than the time specified on the LEC schedule. The form of this list is to be agreed upon by the LEC and IXC in advance of the due date. For example, NWB allows carrier lists in magnetic tape, paper list or ballot form but different timelines are provided for each format. Late customer lists or lists that are not within the guidelines agreed to by the LEC may be rejected. If an IXC accepts LEC ballots from end users, it may provide a list of these customers to the LEC in another agreed upon format. The IXC must, however, retain the actual ballots for inspection by the LEC for a period of one year after the conversion date.

13. IXC lists of customers must be processed by the LEC if they are received by the specified initial ballot deadline. Customer lists from the IXCs will also be honored from the initial ballot deadline to the second ballot deadline, but changes included on these lists will only affect allocated customers.

14. *Second Ballot.* Approximately 50 days before an office conversion, those customers who have not yet made a carrier selection, either through the Equal Access Ballot or directly to an IXC, must be sent a second ballot. This ballot must give the customer another opportunity to make a carrier selection. The customer must be notified that, if the ballot is not returned to the LEC by the date indicated, the customer line(s) will be assigned to the carrier indicated on the ballot. A customer wishing to select a carrier other than the one indicated may do so simply by indicating the preferred carrier on the second ballot and returning it in the enclosed envelope by the ballot deadline. The second ballot must contain the following information:

14.1. The same information as the initial ballot. (See para. 8, *supra.*)

14.2. A conspicuous notice that the customer will be assigned to the IXC indicated on the conversion date if the second ballot is not returned or if the customer does not make individual arrangements with another IXC.

14.3. The assigned IXC, with customer contact telephone numbers.

14.4. The ballot deadline.

This ballot should also be accompanied by a letter summarizing the above requirements and describing in detail how the allocation of customers will take place. The LECs should make every effort to inform customers of their options in the equal access process and the importance of exercising their choice of a primary IXC. In addition to the second ballot and letter, NWB also encloses a brochure that contains questions and answers about the process. NWB also provides an 800 number for customers to ask questions that are not answered in the written information. See Appendix C for examples of NWB's second ballot, letter and brochure.

15. *Number of Ballots.* A minimum of two ballots is required. LECs may opt to provide their customers with more than two ballot opportunities to select an IXC if they find it beneficial to do so.

16. *Ballot and Carrier List Process Schedule.* The LEC must process all customer ballots and carrier lists that are received 20 days prior to the conversion. To the extent their processing systems permit, the LECs are urged to process customer ballots as close to the conversion date as possible.

17. *Allocation Process.* The LEC must tabulate the initial ballots and the carrier lists received and determine the percentage of customers that selected each IXC. The LEC must also prepare a list of all customers who did not return an initial ballot. IXCs participating in the allocation process will then have non-presubscribed customers assigned to them, at random, in proportion to the results of the first ballot response for that particular central office. For example: Assume that Carriers A, B, and C appear on the initial ballot. After the ballots and carrier lists are returned, it is determined that Carrier A received 25 percent of all

the customer line responses, Carrier B received 45 percent, and Carrier C received the remaining 30 percent. The LEC will then assign 25 percent of the non-responding customers (lines) to Carrier A, 45 percent to Carrier B, and 30 percent to Carrier C.

18. *Residence and Business Allocation.* Separate allocation processes will be used for residence and business lines. For example: If a carrier receives 20 percent of the business lines and 15 percent of the residence lines through the initial ballot and carrier list process, the carrier will be allocated the same percentages of business and residence customers on the second ballot.

19. *Allocated Customer Conversion Date Flexibility.* This Plan incorporates the 90-day schedule that NWB has implemented. According to this schedule, customers are allocated after the initial ballot deadline and if they do not return a ballot by the specified second ballot due date, they are converted to their assigned primary IXC on the equal access cutover date. The LECs are allowed to extend the period before which allocations are made and are permitted to convert allocated customers to their assigned IXC after the official central office equal access conversion date. The LEC may not, however, send second ballots to its customers any earlier than 40 days prior to the conversion date or any later than 90 days after that date.

20. *Allocation Process Where All IXCs Do Not Participate.* In central offices where one or more of the IXCs appearing on the first ballot have notified the LEC that they do not wish to participate in the allocation, the non-presubscribed customers are allotted in the following manner. The percentage of lines that the nonparticipating IXCs acquired through the initial process are allocated to the remaining IXCs according to their initial results. For example: The initial presubscription results show that Carrier A receives 30 percent of the lines, Carrier B, 30 percent, Carrier C, 15 percent, Carrier D, 15 percent and Carrier E, 10 percent. Carriers D and E have stated that they will not participate in allocation. The non-presubscribed customers will be allocated by giving both Carriers A and B 40 percent of the lines, and Carrier C, 20 percent.

21. *Late Ballots.* If a ballot or Letter of Agency is not received by the LEC by the second ballot deadline, the customer will be allocated to the IXC listed on the second ballot as the assigned carrier. Ballots received between the second ballot deadline and the conversion date must be honored as soon as possible by the LEC. Late ballots may be given to the LEC's Business Office and handled under normal procedures for changing an IXC selection. Allocated customers must also be allowed to make a free primary IXC choice during the six-month period after the conversion date by contacting the LEC Business Office.

22. *Customer Initiated Changes In Service.* If a customer moves or disconnects during the balloting process, he is handled by the LEC Business Office and normal service order procedures apply. If a customer only wishes to change his primary IXC, the Business Office will initiate the change and charge the customer the appropriate presubscription change fee. New customers are to be handled by the Business Office according to the LEC's new customer presubscription procedures. These procedures should provide new customers with an opportunity to obtain a ballot and make an interexchange carrier selection.

23. *Customer Choice Discrepancy.* When customers indicate more than one carrier choice per line on the ballot, or return an illegible ballot, the LEC must contact the customer for clarification. When both a ballot and Letter of Agency are received for one customer and the designated primary IXC does not match on both documents, the ballot takes precedence and the LEC must process the customer's choice shown on the ballot. In the event that two or more IXCs provide to the LEC a customer list indicating that a particular customer has designated them as the primary IXC, the customer in question must be allocated along with the non-respondents to the initial ballot. In this instance, the letter accompanying the second ballot for that particular customer must mention that the customer is involved in a conflict between two or more IXCs and that a selection must be made by the specified deadline unless the assigned carrier indicated on the ballot is the customer's choice. A list of these customers

in conflict must be sent to the affected IXCs by the LEC. Those IXCs not involved in any customer conflicts should receive a zero conflict report from the LEC. See Appendix C for examples of documents used in conjunction with customer choice discrepancies.

24. *Special Handling of Certain Accounts.* In addition to providing major accounts with ballots, the LEC should contact those customers directly and encourage them to presubscribe when an initial ballot is not received. The LEC is responsible for defining a major account but must include large business customers, federal, local and state governments, and colleges and universities in this classification. The LECs must also determine presubscription procedures for special accounts such as WATS lines, public and semi-public coin telephones, charge-a-call telephones and customer-owned coin telephones and inform the IXCs of their decision.

25. *Retroactive Balloting Procedure.* LECs must provide another opportunity for non-presubscribed customers to select a primary IXC where end offices were converted to equal access prior to May 31, 1985. This provision only applies to LECs that were not using a balloting/allocation process prior to that date. The LECs must send a ballot to each non-presubscribed customer and allow 30 days for return. The LEC should determine which customers have not presubscribed a short time prior to the mailing out of the ballots. Customers who presubscribed after their equal access conversion date but prior to the balloting procedure should not receive ballots. If the customer does not return the ballot and select a primary IXC by the ballot deadline, the LEC will take no action and allow the customer to remain with his current 1+ long distance carrier. If the customer does return the ballot within the 30 days, the LEC should process the change in the central office at no charge and notify the IXC. A letter should accompany this ballot explaining that the customer is being given the opportunity to select a primary carrier but that no change will occur unless the ballot is returned within the specified time. No second balloting or allocation is required for those customers that were subject to equal access conversion dates prior to May 31, 1985.

26. *Retroactive Balloting Schedule.* The LECs must begin this retroactive balloting procedure within 90 days of the effective date of this Order and complete this process for all affected central offices no later than June 1, 1986.

27. *Presubscription Charges.* Customers making carrier selections either by returning the ballot to the LEC or by contacting the IXC directly during the 90 day period prior to the equal access conversion date or during the six months following the conversion date are entitled to do so free of charge. These customers, however, will incur a presubscription change charge for any subsequent changes. Any allocated customer may use the second ballot or may contact the LEC Business Office to make a carrier selection even after allocation has taken place. There will be no charge for this selection, if it is done within six months after the office conversion. A customer will not incur a presubscription change charge if he selects a primary carrier as part of the retroactive balloting process.

28. *Local Exchange Company Responsibility.* The LEC must establish the necessary mechanisms in order to provide the following information to its customers and the interexchange carriers.

28.1. Inform IXCs of ordering procedures, terms and conditions for the provision of Feature Group D Switched Access Service and provide any necessary forms for this ordering process.

28.2. Provide IXCs with central office equal access conversion schedules six months prior to the cutover date.[5]

28.3. Provide documents for IXCs to confirm their participation in the allocation process.

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[5] This requirement is a result of the Modification of Final Judgment. See n. 1 *supra.*

28.4. Provide schedules to IXCs for the balloting and allocation process. These schedules should specify firm dates and times for all IXC and LEC activities. The LEC must promptly notify the IXCs of any changes that occur in these schedules.

28.5. Create ballots, accompanying explanatory letters and ballot return envelopes.

28.6. Provide necessary interim and final reports of allocated customers to IXCs. The LEC must provide a minimum of three reports to each IXC of its customers during the balloting process. All three reports will reflect customer designation of the IXC as its primary long distance carrier as indicated both by the ballot process and the Letter of Agency procedure. The first customer reports must be made available to the IXC halfway between the initial ballot mailing date and the initial ballot deadline. The second report should be sent to the IXCs after the initial ballot deadline and the final report should be sent at the end of the process for a central office equal access conversion. The LEC may decide to provide additional reports as it deems necessary.

See Appendix C for examples of the above information.

29. *Interexchange Carrier Participation Requirements.* In order to be considered eligible to be on an Equal Access Ballot, an IXC must order Feature Group D Switched Access Service from the LEC. The IXC must comply with the Feature Group D ordering procedures of the LEC and a firm order for this service must be received no later than 120 days prior to the central office equal access conversion date. Any IXC that places an order after that time will not be included on that office's ballot. At the time of order placement, the IXC must provide the following information:

29.1. The IXC name exactly as it should appear on the ballot.

29.2. A customer contact number that will appear on the ballot. The IXC may provide two contact numbers if it wishes to divide business and residence calls.

29.3. The name of a person for the LEC to contact if questions arise.

29.4. Any other information that the LEC has allowed or required. (Some IXCs have put marketing or service information on the NWB ballot. See Appendix C.)

IXCs must strictly adhere to the schedules provided by the LEC in order to effect successful equal access conversions.

30. *Interexchange Carrier Allocation Choice.* IXCs choosing to be on the ballot may participate in the allocation process. These carriers must notify the LEC of their intention of participating in the allocation process 52 days prior to the conversion date. When IXCs notify the LEC of their participation in allocation, they must state whether they opt for allocation of either business or residential customers, or both. IXCs who wish to receive allocated traffic must meet the following criteria for a two-year period:

30.1. The IXC must appear on the initial ballot.

30.2. The IXC must have the capability of offering service to any point within the continental United States.

30.3. The IXC must not impose any fixed monthly or nonrecurring charges to assigned customers without their consent.

30.4. The IXC must provide service to the allocated end users that is equal to that provided to the IXC's presubscribed customers.

30.5. The IXC must not charge its assigned customers a rate for its service that will exceed the highest price in effect for MTS-type service without their consent.

30.6. If an IXC wishes to change any of the above criteria within a two-year period from the conversion date, it must notify its allocated customers of those changes 30 days before these changes are to take place. If the customer decides to change carriers because of the IXC's change in policy, the carrier must pay the charges associated with making that change.

An example of an IXC acceptance form of these criteria is included in Appendix C.

31. *Cancellation of IXC Participation.* If an IXC elects to discontinue its Feature Group D Service offering prior to the conversion date of a central office, the IXC is obligated to notify the LEC of the cancellation. The IXC must contact all end users which selected that IXC and notify them that the IXC is cancelling their service and that they should contact the LEC to select a new primary long distance carrier. The IXC must notify the customer that it will pay the presubscription change charge. The cancelling carrier will then be billed by the LEC the appropriate charge for each end user.

32. *Exchange of Information Between IXCs and LECs.* The LEC should establish a standardized format to be used for the flow of information between the LEC and the IXCs during the equal access conversion and balloting process. Formats used by NWB include magnetic tape and paper reports. Report deadlines should be determined in order to insure the accurate and orderly exchange of information between the IXCs and the LEC.

33. *Tariff Update Requirements.* Interstate access tariffs of the local exchange carriers must be revised to reflect the general parameters of the allocation plan within 15 days of the release date of the Order, on 30 days' notice. These revisions must include language providing for:

33.1. End user notification and non-exclusive balloting procedure.

33.2. Allocation process.

33.3. Interexchange carrier customer lists.

33.4. Customer Choice Discrepancy.

33.5. Retroactive Balloting Procedure.

33.6. Presubscription Change Charge Application.

Allocation
Interexchange Service
Presubscription

Common Carrier Bureau clarifies certain sections of the Commission's *Allocation Order*, FCC 85-293, (released June 12, 1985); grants waivers to several local exchange companies to use modified procedures for determining the order of interexchange carriers on Equal Access ballots and for treatment of multi-line customers; and provides guidelines for resolving customer choice disputes and obtaining letters of agency.
—Access And Divestiture Tariffs
CC Docket No. 83-1145

Del. Auth. 85-07

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	
Investigation of Access and Divestiture Related Tariffs	CC Docket No. 83-1145 Phase I
Allocation Plan Waivers and Tariffs	

MEMORANDUM OPINION AND ORDER

Adopted: August 19, 1985; Released: August 20, 1985

BY THE CHIEF, COMMON CARRIER BUREAU:

I. Background

1. In its *Allocation Order*[1] the Commission found the routing of all default traffic[2] to the American Telephone and Telegraph Company (AT&T) to be an unreasonable and discriminatory practice and prescribed instead a uniform allocation plan effective May 31, 1985. *Allocation*

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[1] Investigation of Access and Divestiture Related Tariffs, CC Docket No. 83-1145, Memorandum Opinion and Order, FCC 85-293 (released June 12, 1985).

[2] Default traffic refers to the interexchange telephone calls of any customer who, by the time equal access is available, has failed to make a selection of an interexchange carrier (IXC). *See Allocation Order* at para. 1 n.3.

Order at paras. 18, 22. Local exchange carriers (LECs) required to implement the allocation plan include the Bell Operating Companies (BOCs), GTE Corporation (GTE), the Independent Telephone Companies and any local exchange company that provides equal access on a voluntary basis. *Id.* at para. 32. These carriers were ordered to file revisions to their interstate tariffs to reflect the allocation plan. *Id.* at para. 40. The Commission also directed that any carrier that found itself unable to comply with the plan or believed that a modified approach could achieve the goals of the Order must file a petition for waiver with the Commission. *Id.* at para. 31.

2. On June 27, 1985, the LECs filed the requisite tariff revisions. The Bell Atlantic telephone companies (Bell Atlantic),[3] the BellSouth Corporation (BellSouth), the NYNEX telephone companies (NYNEX), Pacific Bell, the Mountain States Telephone and Telegraph Company (Mountain Bell) and the Pacific Northwest Bell Telephone Company (PNB) also filed petitions for waiver of the *Allocation Order*. The Southwestern Bell Telephone Company (Southwestern) filed an attachment to its tariff revisions which, according to the company, "identifies any deviations" between its plan and the plan ordered by the Commission. We will treat Southwestern's "Attachment A" as a waiver petition. AT&T, the Ameritech Operating Companies (Ameritech),[4] and Southwestern filed Petitions for Clarification of certain sections of the *Allocation Order*.[5]

II. Petitions for Clarification

A. Ameritech's Petition

3. Ameritech asks that the Commission clarify two aspects of the prescribed allocation plan: (1) whether interexchange carriers (IXCs) should be permitted to participate in the allocation process if they decline to serve allocated customers who will not consent to minimum monthly charges; and (2) whether non-presubscribing customers should be allocated randomly on a per customer basis or on a per line basis.

4. No clarification should be required in regard to the service requirements imposed on IXCs by the Order. The Commission rejected

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[3] The Bell Atlantic companies include the Bell Telephone Company of Pennsylvania, the four Chesapeake and Potomac Telephone Companies, the Diamond State Telephone Company and the New Jersey Bell Telephone Company.

[4] The Ameritech Operating Companies include Illinois Bell Telephone Company, Indiana Bell Telephone Company, Inc., Michigan Bell Telephone Company, The Ohio Bell Telephone Company and Wisconsin Bell, Inc.

[5] US Telecom, Inc., GTE Sprint Communications Corporation, MCI Telecommunications Corporation, and Satellite Business Systems have filed Petitions for Partial Reconsideration of the *Allocation Order*. These petitions will be considered in a later Order. In addition, a number of parties filed comments in regard to both the waiver petitions and the tariffs. A list of parties filing comments and reply comments in this matter is provided at Appendix A.

proposals to permit interLATA carriers "to reject certain assigned customers for any reason." *Allocation Order* at para. 9. The Commission stated that

> Limiting the IXC acceptance of allocated customers would allow some carriers to choose only attractive customers while other carriers would be allocated a greater proportion of less attractive customers. In addition, IXCs who have agreed to participate in the allocation process have an obligation as common carriers to serve all customers allocated to them.

Id. at para. 25.

5. In the face of this clear language, we are concerned by Ameritech's report that at least one interLATA carrier interprets the Order's prohibition against imposing "any fixed monthly or nonrecurring charges to assigned customers without their consent,"[6] to permit the IXC to contact all the customers allocated to it, explain that it has a fixed monthly charge, and decline to serve any customers not willing to pay the monthly minimum.[7] As Ameritech aptly observes, this interpretation contradicts the Commission's explicit prohibition against carriers picking and choosing among customers allocated to them and its consequent intent that all IXCs participating in the plan provide at least one payment plan with no monthly minimum. IXCs which do not provide a plan with no monthly minimum may not participate in the allocation process.

6. In regard to its second request for clarification, Ameritech explains that its allocation process has two steps. Ameritech Petition at 5. Percentages are first calculated for the interLATA carriers based on ballot responses, and non-presubscribing customers are then distributed among the carriers participating in the allocation process. However, while Ameritech calculates interLATA carrier percentages on a per-line basis, it proposes to allocate non-presubscribing customers on a per-customer basis. The company argues that, because IXCs direct their marketing efforts to different markets which have different average numbers of lines per customer, the number of customers (as opposed to the number of lines) is a fairer measure of a carrier's market success. Ameritech argues that distributing non-presubscribed customers presents a different situation and that allocating such customers on a per-line basis might distribute multi-line customers to more than one carrier, causing confusion and expense.

7. We conclude that it is not unreasonable for Ameritech to allocate the traffic of non-presubscribing customers on a per customer basis. Allocating on a per line basis might result in assigning the lines of a single customer to two IXCs. The Commission did not contemplate distributing

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[6] *Allocation Order*, Appendix B at para. 30.3.

[7] The Ameritech Operating Companies' Petition for Clarification (Ameritech Petition), filed July 5, 1985, at 3.

the traffic of multi-line end users to more than one carrier. Moreover, the Order provides that the LECs may contact major accounts, encourage such customers to select a carrier, and thus avoid the necessity of allocating their traffic. *Allocation Order,* Appendix B at para. 24. In addition, the identities of end users likely to have substantial numbers of lines are readily available to the IXCs. Permissible LEC contacts with major accounts and the IXCs' own marketing efforts should serve to reduce the number of multi-line customers assigned to the allocation pool and limit the potential for distortions in distribution.

B. AT&T's Petition

8. AT&T requests interpretations:[8] (1) that a voice recording or other form of electronic signature can satisfy the requirement that IXCs maintain letters of agency signed by their customers;[9] (2) that multi-line customers may submit orders for service using billed telephone numbers or some other unambiguous description of the customer's designation of a primary IXC; and (3) that LECs can lawfully process presubscription orders placed by customers with authorization dates on or prior to June 12, 1985.

9. The Commission's requirement that IXCs maintain letters of agency is designed to facilitate dispute resolution, to minimize consumer confusion, and to protect the LECs from processing change orders for which no party is clearly responsible. The consumer who must sign a document can be presumed to have read its contents and to understand the nature and extent of the service relationship with the IXC. The IXC which has such signed letters of agency is protected from the effects of customer misunderstanding and from potential responsibility for unauthorized changes. The LEC has available for review an easily authenticated document in resolving customer disputes. Any of the foregoing parties would bear a heavy burden if obliged to review electronic recordings to verify customer orders.[10] IXCs are free to continue their telemarketing efforts but should take steps designed to obtain signed letters of agency or confirmation of choice from their customers pursuant to the guidelines outlined in para. 21, below.

10. In regard to its second request for clarification, AT&T states that customers presently place presubscription orders on a billed telephone number (BTN) basis. AT&T states that a BTN may have associated with it one or more additional lines or numbers and thus may represent hundreds or even thousands of lines. AT&T Petition at 11. AT&T argues that it is

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[8] AT&T Petition for Clarification (AT&T Petition), filed July 12, 1985.

[9] *Allocation Order,* Appendix B at para. 10.

[10] Commission enforcement activities would also be hampered if staff were obliged to review electronic records rather than written ones.

cumbersome and unnecessary for customers to provide individual line detail. AT&T states that use of BTN ordering would be consistent with the practice of many LECs to accept notification of primary IXC selections from IXCs on a BTN basis. Further, AT&T asserts that customers may want to designate a single primary IXC for multiple BTNs at a given location, at multiple locations throughout the country, or to include their corporate subsidiaries in the designation and that such customers should be allowed to do so "with a minimum of complication." *Id.* at 13. AT&T argues that such customers should be enabled to list either billed telephone numbers or "other specific customer description which indicates unambiguously the scope of the customer's designation of a primary IXC." *Id.*

11. AT&T's request is limited to the detail which must be included in letters of agency authorizing an interexchange carrier to act as agent.[11] AT&T states that its clarification petition does not address the nature of the information that the IXCs must use in submitting presubscription orders to the LECs. The Commission did not intend to impose unreasonable burdens on multi-line customers in their selection of an interexchange carrier. We conclude that the requirements set out at para. 10.4 of Appendix B may be fulfilled either by provision of BTNs or by other unambiguous customer descriptions indicating the scope of the customer's designation of a primary IXC.

12. We agree that AT&T's third interpretation, regarding the status of customer orders placed with an IXC with authorization dates of June 12, 1985 or earlier, is a reasonable one. LECs may, in compliance with our Order, process presubscription orders placed by IXCs between May 31 and June 12, 1985.

C. Southwestern's Petition

13. Southwestern asks that the Commission "clarify" that the *Allocation Order* did not find a violation of the Communications Act in the BOCs' procedures prior to May 31, 1985 or "actions taken after that date consistent with the Order and necessary to the implementation of the ballot and allocation plan." Southwestern Petition for Clarification at 7. In its *Allocation Order,* the Commission found that the default of all nonpresubscribed traffic to a single carrier was unreasonable and discriminatory under the Communications Act.[12] *Allocation Order* at para. 22. The Order was prospective, effective May 31, 1985 and was not based upon findings of carrier liability for violations of the Act. BOCs which, prior to

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[11] AT&T's petition refers only to para. 10 of Appendix B, which covers only the conditions which must be recognized in letters of agency designating a carrier as a customer's primary IXC.

[12] 47 U.S.C. §§ 201(b) and 202(a).

May 31, 1985, followed procedures conforming to previous Commission decisions and policies cannot be considered to have been in violation of the Act. Actions taken after the effective date of the Order must conform to the requirements of the Order.

III. Waiver Petitions

A. Procedures for Determining IXC Order on Equal Access Ballots

14. Bell Atlantic, BellSouth, and NYNEX request approval of their procedures for determining the order of IXCs on the Equal Access Ballot. The LECs are required to devise methods to give IXCs an equal opportunity to appear first on the ballot. *Allocation Order*, Appendix B at para. 7. Bell Atlantic proposes to conduct a random drawing once every six months. Ballots for Bell Atlantic end offices converting during the the six-month period after each drawing would list IXCs in the order determined by the drawing. BellSouth and NYNEX propose to conduct a separate drawing to determine IXC sequence for each end office conversion. IXCs would be listed in the same order on all ballots for that end office throughout the presubscription process. The BellSouth and NYNEX procedures for determining IXC sequence are within the spirit of para. 7 and have, in general, received the support of the IXCs. *See, e.g.*, Comments of MCI, July 12, 1985 at 8. We therefore grant their waiver requests. Bell Atlantic's plan, however, does not provide sufficient opportunity for IXCs to appear first on the ballot, and is opposed by the parties. MCI argues that

> the consequence of Bell Atlantic's proposal — in light of the fact that a substantial majority of end offices will be converted to equal access in the next six months — is that IXCs would not, in fact, have an equal opportunity to appear first on Bell Atlantic ballots.

Id.

GTE/Sprint asserts that Bell Atlantic's plan "would represent a significant departure from the Commission's goal of giving all carriers an equal opportunity to appear first on the ballot as each end office is converted." GTE/Sprint Reply Comments, July 19, 1985 at 15. Provision of more frequent opportunities to appear first on the ballot is not unduly burdensome, as the BellSouth and NYNEX procedures demonstrate. We therefore conclude that Bell Atlantic's proposal to conduct a random drawing every six months does not comply with the Commission's requirement that each LEC devise methods to give IXCs an equal opportunity to appear first on the ballot.

B. Customer Choice Discrepancy and Letters of Agency

15. Bell Atlantic, Pacific Bell, Mountain Bell Telephone and Telegraph Company (Mountain Bell) and NYNEX have requested waivers to permit

implementation of modified approaches in disposing of disputes arising from an end user's identification of more that one primary IXC. Since the resolution of such disputes is closely related to the availability and use of letters of agency, we will discuss these aspects of the Order in tandem.

16. The Commission's Order provides that:

> when customers indicate more than one carrier choice per line on the ballot, or return an illegible ballot, the LEC must contact the customer for clarification. When both a ballot and Letter of Agency are received for one customer and the designated primary IXC does not match on both documents, the ballot takes precedence and the LEC must process the customer's choice shown on the ballot. In the event that two or more IXCs provide to the LEC a customer list indicating that a particular customer has designated them as the primary IXC, the customer in question must be allocated along with the non-respondents to the initial ballot. In this instance, the letter accompanying the second ballot for that particular customer must mention that the customer is involved in a conflict between two or more IXCs and that a selection must be made by the specified deadline unless the assigned carrier indicated on the ballot is the customer's choice. A list of these customers in conflict must be sent to the affected IXCs by the LEC. Those IXCs not involved in any customer conflicts should receive a zero conflict report from the LEC.

Allocation Order, Appendix B at para. 23.

17. Bell Atlantic proposes to continue its current procedure, whereby IXCs indicate on their orders whether a presubscribed customer has been informed of the charge to change IXCs and has agreed to the change. If Bell Atlantic receives an order containing this notation from an IXC for a customer already presubscribed to another IXC, it processes the order and charges the customer for the change. If the notation is missing on the order, it is returned to the IXC, with a notice that the customer is already presubscribed. Bell Atlantic states that, consistent with the Order, the ballot controls if Bell Atlantic receives a presubscription order from one IXC and subsequently receives a ballot from the same customer designating a different IXC. Bell Atlantic argues that this procedure is preferable to the procedure prescribed in Appendix B because it allows IXCs to market freely their services.

18. NYNEX also asks to continue to use its current conflict resolution procedures. NYNEX gives all presubscription orders an equal weight and resolves conflicts on the basis of authorization dates: the order with the later date prevails. If two or more orders are received with the same authorization date, the order received first by the LEC prevails. NYNEX argues that its procedures recognize that a customer has the right to change his or her primary carrier selection at any time in the process and therefore is preferable both to giving automatic priority to the ballot and to allocating customers involved in a conflict.

19. Pacific Bell proposes similar treatment of conflicting orders. When both a ballot and letter of agency are received for one customer and the designated primary IXC does not match on both documents, or when two

or more IXCs provide lists to the LEC indicating the customer has selected them, Pacific Bell proposes to process the order with the later authorization date. If the dates are the same on the ballot and the letter of agency, the ballot takes precedence. If the dates are the same on two or more IXC lists, the list processed first by Pacific Bell takes precedence. Pacific Bell argues that these procedures reflect affirmative customer choice more accurately than do those prescribed in the Order.

20. Mountain Bell requests a waiver to permit it, upon discovery that an end user appears in more than one IXC's customer list, to contact immediately the end user to resolve the discrepancy. Mountain Bell argues that its approach avoids allocation of customers who have made a positive choice of IXCs.

21. The concept of "authorization date" is either explicitly (NYNEX and Pacific Bell) or implicitly (Bell Atlantic) central to three of these proposed modifications to our prescribed customer choice discrepancy procedures. At least one commenting party has objected to the use of a "later authorization date" to identify a primary IXC, on the grounds that an IXC, through error or abuse might assign a later authorization date to a customer's order. *See, e.g.*, Reply of Allnet Communications Services, Inc., filed July 19, 1985 at 5. The potential for such error or abuse is diminished when an IXC obtains letters of agency. Such documents, together with prompt notification to all affected parties, should facilitate dispute resolution. We recognize, however, that end users who make a verbal commitment to use a carrier's services may not return signed authorizations promptly. Therefore, we will grant the requested waivers (discussed in paras. 17-20, *supra*) of the plan prescribed in Appendix B of the *Allocation Order* subject to the following guidelines:[13]

> (1) The IXCs are required to certify at the time they submit end user lists to the LECs that they have on file, or have instituted steps designed to obtain signed letters of agency or confirmations of choice from the end user. The IXCs are not required to submit letters of agency when submitting end user lists to the LECs, but should maintain the confirmations or letters on file for use in dispute resolution. IXCs should request written confirmations of choice from their customers no later than the date of submission of their first bill to the customer.
>
> (2) When the LEC identifies a conflict between a ballot and an IXC list, or between lists submitted by two or more IXCs, the LEC must notify, within 10 days, all affected IXCs via a conflict report.
>
> (3) If, upon receipt of a conflict report, the IXC certifies to the LEC that it has on file a signed letter of agency with a date subsequent to that on the ballot, that IXC becomes the primary IXC for that end user and no change charge is assessed to either the IXC or the end user.

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[13] This action is of course subject to Commission action on the pending petitions for reconsideration of the *Allocation Order*.

(4) In a conflict, if the IXC is unable to obtain a letter of agency signed by the end user, the ballot controls.

22. The conflict reports and the regular reports mandated by the Order[14] are also essential elements in prompt, equitable dispute resolution. Several IXCs have complained that they have not received timely notice from the LECs regarding either customer conflicts or interconnection schedules. Carriers should direct additional attention to the reports to ensure that all required information is provided to the IXCs within the time frames specified in this Order and in the allocation plan.

23. We conclude that, subject to the institution of procedures conforming to the above guidelines, that the petitions filed by Bell Atlantic, NYNEX and Pacific Bell in regard to disposition of customer disputes should be granted.

24. Mountain Bell's waiver request can also be accommodated within the parameters of the guidelines detailed above at para. 21. Mountain Bell's proposal for immediate contact to resolve discrepancies renders timely assistance to consumers and may assist the carrier in identifying procedural or mechanical causes of duplicate listings. We therefore grant the requested waiver on condition that Mountain Bell also immediately notifies all IXCs involved in the selection dispute, using the sames means of notification for all parties.

C. Multi-line Accounts

25. The Order requires that on the initial Equal Access Ballot end users be furnished the option of selecting a different IXC for each of their lines. *Allocation Order*, Appendix B at para. 8.5. Bell Atlantic, Pacific Bell and PNB request waivers of this requirement. Bell Atlantic proposes to provide a special box on its ballot which multi-line customers can check if they wish to presubscribe lines within a single account to different IXCs. When customers indicate such an interest, Bell Atlantic will send end users with 20 lines or less a special ballot listing all lines on the account, permitting the end user to make a line-by-line designation of IXCs. If a customer has more than 20 lines, Bell Atlantic will call the customer to take its designation of IXCs. Pacific Bell will provide a similar box on its ballot, but proposes to contact all customers who indicate a wish to presubscribe lines to different primary IXCs. Both Bell Atlantic and Pacific assert that their proposed procedures will reduce customer confusion and administrative burdens. PNB proposes to continue its current practice of listing only a customer's main billing number, with a ballot notation that customers who wish to split their service among different carriers should contact either the IXC or PNB. In addition to the preceding waiver requests, Southwestern in its tariff at Appendix A

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[14] See *Allocation Order*, Appendix B at paras. 23 and 28.

states that its residential customers are not allowed to select more than one IXC.

26. MCI, Allnet and GTE/Sprint oppose these proposals. They argue that the LECs may influence the customer's choice of a carrier if they are permitted to contact customers directly during the presubscription process.[15] Both Pacific Bell and Bell Atlantic deny any interest in influencing customer choice. Parties opposing the waivers fail to identify any interest that the LECs would serve by directing customers to one IXC in preference to another. While the *Allocation Order* requires that the ballot provide for the selection of different IXCs for each line, it did not require that each such line be listed on the ballot. In the case of end users with substantial numbers of lines, such listings would prove unduly burdensome on the LEC. Bell Atlantic's proposal in effect provides special handling for major accounts and represents a reasonable accommodation with the requirements of the Order and we therefore grant its waiver request. Pacific Bell's plans to combine ballot notification with follow-up calls also comports with the intent of the Order. PNB's proposal, however, to merely continue its present procedures, which require customers to initiate an additional contact with an IXC, does not comport with the Commission's intent to provide the end user with an efficient method of notifying the LEC of its choice. We therefore deny PNB's waiver request. Finally, Southwestern has filed no waiver request in regard to its plan to deny choice to residential multi-line users, in violation of the *Allocation Order*. We reject its allocation plan insofar as it fails to provide for that choice.

D. Additional Waiver Requests

27. *Processing IXC submitted customer lists.* LECs must process all customer ballots and carrier lists that are received 20 days prior to the date of conversion. *Allocation Order,* Appendix B at para. 16. Mountain Bell states that it does not accept customer lists between the deadline for the return of the first ballot and the equal access conversion date. Mountain Bell argues that its procedure greatly reduces the potential for confusion caused by conflicts between second ballots returned by end users and IXC-generated customer lists. MCI opposes Mountain Bell's request, challenging Mountain Bell's representation that no IXC has complained about its procedure.[16] MCI asserts that under Mountain Bell's proposal, customers who select a primary carrier and register their selection with an IXC between the initial ballot deadline and the date of

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[15] MCI Comments, July 12, 1985 at 6; GTE/Sprint Comments, July 12, 1985 at 17; Allnet Reply Comments, July 19, 1985 at 8.

[16] Opposition of MCI to Petitions for Waiver of the Commission's Allocation Order (MCI Opposition), filed July 17, 1985 at 6.

end office conversion would be allocated solely because Mountain Bell refuses to process their presubscription orders. While reduction in confusion is a desirable goal, it should not be achieved at the expense of consumer choice. We therefore deny Mountain Bell's waiver request and direct it to comply with the Commission's Order to process all ballots and IXC lists received 20 days prior to conversion.

28. *Reports to IXCs.* LECs are required to provide the IXCs with a minimum of three reports during the balloting process. *Allocation Order*, Appendix B at para. 28.6. Mountain Bell seeks permission to eliminate the first report which "must be made available to the IXC halfway between the initial ballot mailing date and the initial ballot deadline." *Id.* Mountain Bell states that generating this report would cause additional expense and place a burden on its Customer Records Information System (CRIS), which is also used by Mountain Bell for normal service order activity and billing. The initial report assists the IXCs in identifying discrepancies between their records and those of the LEC. Early identification of such problems serves to facilitate dispute resolution and to reduce confusion. The IXCs have complained to the Bureau staff and to the Department of Justice[17] regarding their difficulties in obtaining timely information from the Bell Operating Companies. The orderly implementation of presubscription might be impeded by reducing the amount of information transmitted to the IXCs and we therefore deny Mountain Bell's waiver request.

29. *Reduction of period for ballot return.* The Commission's Order provides that "[c]ustomers should be asked to return the initial ballots within 30 days of their receipt." *Allocation Order*, Appendix B at para. 8. PNB seeks a waiver to require end users to return ballots within approximately three weeks.[18] PNB states, however, that its allocation process will take place approximately 30 days after the mailing date of the initial ballot and that end users who return their ballots later than 23 days therefore may have their ballot choices processed. The *Allocation Order* also requires that LECs process all ballots and IXC-submitted lists that are received 20 days prior to conversion. In view of this additional insurance that customer choices will be processed, we conclude that PNB may request end users to return their ballots within 23 days.

30. *IXC access order cutoff.* In order to be considered eligible for inclusion on an Equal Access Ballot, an IXC must order Feature Group D

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[17] *See* letters to the Bell System Holding Companies from Acting Assistant Attorney General, dated June 25, 1985.

[18] PNB's waiver petition states that ballots are subject to the schedule provided in the following example: "July 1: Date on which PNB mails ballot; July 23: Date by which end users are asked to return ballot; July 31: Date that the allocation report is prepared." PNB Petition for Waiver at 3.

Switched Access Service (FGD) from the LEC. An IXC must place a firm order for this service no later than 120 days prior to the central office conversion date. *Allocation Order*, Appendix B at para. 29. Bell Atlantic seeks to extend this deadline to require IXCs to submit their orders 135 days prior to conversion. Bell Atlantic states that the extension is necessary to ensure completion of preconversion work, such as facilities installation and testing and programming switches. In addition, Pacific Bell and NYNEX each filed tariffs requiring IXCs to order FGD earlier than 120 days prior to conversion, though neither filed waiver requests. Pacific Bell requires orders to be placed 180 days prior to the plant test date, which may be several weeks in advance of an end office conversion date; NYNEX requires that FGD orders be placed 180 days prior to conversion. Pacific Bell states that early ordering is required to accommodate its procedure of clustering end offices by geographic areas. It interprets para. 29 of Appendix B to require that IXCs provide notice to the LECs 120 days prior to conversion that they wish to participate in allocation. Pacific Bell Reply Comments, July 19, 1985 at 8. NYNEX argues that the Commission permitted exchange carriers to retain existing ordering guidelines and that the IXCs must abide by them. NYNEX Reply Comments, July 19, 1985 at 7. US Telecom objects to the foregoing ordering provisions, and asserts that they do not conform to the Commission's intent to allow the LEC sufficient time to plan facilities while giving the IXC the maximum time during which to market and accurately forecast its facility needs. US Telecom Opposition to Requests for Waiver, July 19, 1985 at 8.

31. Para. 29 of Appendix B prescribes the conditions for IXC participation in allocation. The Order does not permit the LECs to impose additional allocation requirements on the IXCs. By establishing the earlier ordering deadlines for FGD, Pacific Bell and NYNEX have, in effect, imposed such an additional condition. We recognize, however, that the LECs may require more than 120 days notice of FGD orders to complete preconversion work. The IXCs, however, also require sufficient time in which to market and forecast their facility needs. The LECs are required to give notice of end office conversions six months prior to the date of such conversions.[19] The prescription of a 120-day ordering deadline was predicated on that six-month notice requirement. In order to accommodate the needs of both the LECs and the IXCs, we will permit earlier ordering deadlines for FGD provided the LEC also increases its notice of end office conversions by an equivalent period. Thus, Bell Atlantic is granted a waiver to extend its ordering deadline to 135 days, but must give notice to

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[19] *See* MTS and WATS Market Structure, CC Docket No. 78-72, Phase I, Second Reconsideration Order, 97 FCC 2d 834, 860; Section 69.205(a) of the Commission's Rules, 47 C.F.R. §69.205(a) (1984).

the IXCs 195 days prior to end office conversions. We will also treat the NYNEX and Pacific Bell tariff provisions in this matter as waiver requests. Each of these LECs may extend the deadline for FGD orders to 180 days provided they give IXCs 240 days' notice of end office conversions.

32. *Inclusion of certain IXCs in BellSouth allocation.* IXCs choosing to participate in the allocation process must appear on the initial ballot. *Allocation Order,* Appendix B at para. 30.1. BellSouth states that BellSouth had implemented, prior to June 1, 1985, a three-ballot procedure for end offices converting to equal access during and after September 1985. BellSouth reports that some IXCs had already responded to the BellSouth companies concerning September and October conversions. The companies are concerned that some IXCs which did not elect to participate in some or all of the September and October conversions would have done so if they had known when they made their decisions that allocation would take place. BellSouth proposes to permit those IXCs, which do not appear on the first ballot for the September and October conversions only, a chance to appear on the second ballot and participate in allocation. We agree that such a procedure could increase the number of IXCs presented for public choice, and that, since the waiver is limited in time and effect, it does not appear to result in any unfair treatment of other IXCs. BellSouth's waiver request in this matter is therefore granted.

IV. Tariff Revisions

33. The Commission directed that LECs required to implement the allocation plan[20] file revised interstate access tariffs to reflect the prescribed allocation plan within 15 days of the release date of the Order. *Allocation Order* at para. 40. The Commission directed that the revisions include language providing for (1) end user notification and non-exclusive balloting procedure, (2) allocation process, (3) interexchange carrier customer lists, (4) customer choice discrepancy, (5) retroactive balloting procedure, and (6) presubscription charge application.

34. On June 27, 1985, the requisite tariff revisions were filed by the BOCs, GTE, the National Exchange Carriers Association (NECA), and Central Telephone (Centel) of Nevada. Rochester Telephone Corporation (Rochester), pursuant to special permission, filed revisions on July 10, 1985. In general, the revised tariffs provide for presubscription and allocation procedures in compliance with the prescribed plan. In those instances where procedures required clarification, the Bureau staff has worked with the carriers to develop revisions which comport with the Order. A number of the objections raised by the parties in comments on these tariffs (*e.g.,* treatment of customer choice discrepancies, calculation

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[20] *See* para. 1, *supra.*

of the allocation percentages, letters of agency) have been disposed of in our treatment of waiver petitions, *supra.* For the most part, therefore, this Order will not discuss each of these tariffs in detail. They will be permitted to become effective August 20, 1985.[21] Several commenters have objected that the LECs' tariffs do not contain sufficient detail regarding their allocation plans.[22] The LECs were not required by the Order to provide extensive detail in their tariffs regarding their procedures. We are requiring, however, that they file revisions concerning their arrangements for assessing change charges. Those revisions, and major objections raised by the parties, are discussed below.

A. Retroactive Allocation

35. The Commission Order directed LECs to provide another opportunity for non-presubscribed customers to select a primary IXC where end offices were converted to equal access prior to May 31, 1985. *Allocation Order,* Appendix B at para. 25. No second balloting or allocation was required, however, for such customers. *Id.* Southwestern's tariff provides for retroactive allocation for customers served by an end office converted prior to May 31, 1985.[23] AT&T argues that Southwestern's retroactive plan "contravenes the express and mandatory provisions set forth in Appendix B of the Order"[24] and requests that the Commission direct Southwestern to delete this provision from its tariff revisions. Southwestern asserts that its retroactive allocation plan "is consistent with the principles enunciated in the Commission's Order" and, in this instance, "exceed the Commission's requirement that customer choice is fully effectuated."[25]

36. The language of the Order in respect to retroactive allocation, alleged by AT&T to forbid such allocation, is permissive, not mandatory. The Commission states that "retroactive allocation *will not be ordered* for conversions prior to the effective date of this Order . . . . *[O]rdering* retroactive allocation would be unfair and disruptive." *Allocation Order* at para. 28 (emphasis added). Para. 25 of Appendix B reflects the same permissive approach: "no second balloting or allocation *is required* for

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[21] The tariffs were filed with an original effective date of July 27, 1985. In order to allow the Commission staff sufficient time to analyze the complex issues raised by the filings and the various waiver requests and related comments, the effective date of the tariffs was deferred to August 20, 1985.

[22] *See. e.g.,* U.S. Telecom Inc. (U.S. Telecom) Opposition to Requests for Waiver; Comments of GTE Sprint Communications Corporation (GTE/Sprint), filed July 12, 1985.

[23] Southwestern Bell Telephone Company, Tariff F.C.C. No. 68, § 13.3.3(c)(5).

[24] Comments of the American Telephone and Telegraph Company, filed July 12, 1985 at 2. AT&T raised no objections to any of the other tariff revisions.

[25] Reply Comments of the Southwestern Bell Telephone Company filed July 19, 1985 at 2, 3.

those customers that were subject to equal access conversion dates prior to May 31, 1985. . . ." (emphasis added).

37. We concur in Southwestern's conclusion that its plan for retroactive allocation is consistent with the principles expressed in the *Allocation Order* and we deny AT&T's request to reject Southwestern's tariff insofar as it provides for such allocation. We wish to clarify, however, that Southwestern's retroactive allocation procedures must include sending allocated end users a second ballot providing the customer with another opportunity to make a carrier selection.[26]

B. "No PIC" Option

38. Satellite Business Systems (SBS) requests rejection of Bell Atlantic's and Southwestern's tariffs insofar as they provide a "No PIC" option.[27] "No PIC", an acronym for "no primary interexchange carrier," would indicate that the customer is opting to make all long distance calls by using a 10XXX access code. The Commission rejected as too burdensome a proposal that such an option be provided on the ballot. *Allocation Order* at para. 25 n.37. SBS interprets that decision to prohibit a customer from ever selecting such an option. The Commission did not intend such a result. Tariffs filed by the Bell Atlantic companies and Southwestern provide that a customer can request the "No PIC" option only by contacting the local exchange carrier's business office. Such a provision comports with the Commission's Order and we therefore deny SBS's request that we reject the applicable tariff subsections.[28]

C. Balloting Procedures for New Customers

39. MCI requests that the Commission suspend and investigate the provisions regarding new customer presubscription orders in the LECs' tariffs.[29] MCI asserts that the *Allocation Order* requires that LECs obtain new customers' signatures on presubscription ballots, but that the LECs' allocation tariffs are ambiguous with respect to obtaining signed ballots or orders from new customers. MCI argues that LECs should not be permitted to accept orders under less stringent procedures than IXCs.

40. The Order provides that new customers are to be handled by the Business Office according to the LEC's new customer presubscription procedures. *Allocation Order* at para. 22. Such procedures should provide

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[26] *See* Allocation Order, Appendix B at para. 14.

[27] Satellite Business Systems Petition to Reject and Opposition to Petitions for Waiver, filed July 12, 1985 at 2. The NYNEX companies also provide this option to consumers.

[28] C&P Telephone Companies, Tariff F.C.C. No. 3, Section 13.3.3(B)(5)(a); Bell Telephone Company of Pennsylvania, Tariff F.C.C. No. 41, Section 13.3.3(B)(5)(a); New Jersey Bell Telephone Company, Tariff F.C.C. No. 38, Section 13.3.3(B)(5); Southwestern Bell Telephone Company, Tariff F.C.C. No. 68, Section 13.3.3(E).

[29] MCI Petition to Suspend and Investigate, or Alternatively for Clarification, and for Partial Rejection, Petition filed July 15, 1985 at 8.

new customers with an opportunity to obtain a ballot. *Id.* We recognize that the LECs' service order processing procedures might be unnecessarily delayed if they were obliged to await the return of the ballot before processing a new interconnection order. We conclude that the requirements of para. 22 are met when the LEC takes a verbal order for service and subsequently sends a confirmation notice to the customer. LEC personnel taking the verbal order should provide new customers with the names and, if requested, the telephone numbers of the IXCs and should devise procedures to ensure that the names of IXCs are provided in random order. New end users who return confirmation notices identifying an IXC different from that given verbally to the LEC should have such selections processed without a change charge.

D. Change Charge Provisions

41. Each of the allocation tariffs filed by the LECs contains subsections describing the LEC's proposal for billing for the charge to change IXCs. These sections, in general, fail to provide the public with sufficient information regarding billing for such charges. The tariffs typically state that responsibility for change charges is "as set forth in the Commission's Allocation Plan." *See, e.g.,* Southern Bell, Transmittal Nos. 1319, 1322 and 1323, § 13.4(c). Such cross-references fail to provide adequate notice to the public regarding responsibility for change charges. The LECs are therefore directed to file revisions to their allocation tariffs containing the following provisions: (1) the amount of the change charge; (2) no change charge will apply to end users who select a primary IXC as part of the retroactive balloting process; (3) new end users will be asked to select a primary IXC at the time they place an order for service; new end users will be sent a confirmation notice and will not be charged for this initial selection; (4) after the conversion date, end users will be charged for any change; (5) if an IXC elects to discontinue Feature Group D service in the converting end office prior to the conversion date or within two years after the introduction of Feature Group D in the converting end office, the IXC is obligated to contact in writing all end users who have selected, or been allocated to, the cancelling IXC as their designated IXC, inform these end users of the cancellation, request the end users to select a new IXC and state that the cancelling IXC will pay for the change charge; and (6) for a period of two years from the discontinuance of FGD service the LEC will bill a cancelling IXC the change charge for each end user that this IXC currently has designated to it.

V. Conclusion and Ordering Clauses

42. We find the tariffs filed by the affected LECs to be, in general, responsive to the allocation plan prescribed in the Commission's Order. We believe that implementation of this plan enables consumers better to

understand and exercise their rights in selection of a primary interexchange carrier. We will not delay the effective dates of those tariffs but will require the LECs to file modifications to their tariffs to comport with this Order within 10 days of the release date of this Order, to be effective on not less than seven days notice.

43. Accordingly, IT IS ORDERED pursuant to Section 0.291 of the Commission's Rules, 47 C.F.R. § 0.291, that all local exchange carriers as defined herein put into effect immediately the modifications described herein to the allocation plan prescribed in the *Allocation Order. Investigation of Access and Divestiture Related Tariffs,* CC Docket No. 83-1145, Phase I, Memorandum Opinion and Order, FCC 85-293 (released June 12, 1985).

44. IT IS FURTHER ORDERED that the waiver petitions filed in this matter, ARE GRANTED to the extent described herein and are otherwise DENIED.

45. IT IS FURTHER ORDERED that to the extent that denial of a waiver to a local exchange carrier affects provisions appearing in that carrier's tariff, those provisions ARE REJECTED and the affected carriers must revise their tariffs in accordance with this Order.

46. IT IS FURTHER ORDERED that the petitions to reject filed by Satellite Business Systems and MCI Telecommunications Corporation ARE DENIED.

47. IT IS FURTHER ORDERED that the interstate access tariffs of all local exchange carriers be revised to reflect the guidelines set out in this Order regarding the responsibility for change charges.

48. IT IS FURTHER ORDERED that Sections 61.58, 61.59 and 61.74 of the Commission's Rules, 47 C.F.R. §§ 61.58, 61.59, 61.74, are waived for the purposes of implementing this Order.

49. IT IS FURTHER ORDERED that this Order is effective upon adoption.

FEDERAL COMMUNICATIONS COMMISSION
ALBERT HALPRIN, *Chief, Common Carrier Bureau*

*Appendix A may be seen in FCC's Dockets Branch, 1919 M Street, N.W., Wash., D.C. 20554.

Amateur Operator
Amateur Radio Service
Antenna, Structure
Antenna, Tower

By declaratory ruling, Commission announced a limited preemption of state and local regulations governing amateur installations. The Commission said that there is a strong federal interest in promoting amateur communications and that state and local regulations that preclude amateur communications are in direct conflict with federal objectives and must be preempted.
—*Amateur Radio Preemption*

FCC 85-506

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In the Matter of Federal preemption of state and local regulations pertaining to Amateur radio facilities.	PRB-1

MEMORANDUM OPINION AND ORDER

Adopted: September 16, 1985; Released: September 19, 1985

BY THE COMMISSION: COMMISSIONER RIVERA NOT PARTICIPATING.

Background

1. On July 16, 1984, the American Radio Relay League, Inc. (ARRL) filed a Request for Issuance of a Declaratory Ruling asking us to delineate the limitations of local zoning and other local and state regulatory authority over Federally-licensed radio facilities. Specifically, the ARRL wanted an explicit statement that would preempt all local ordinances which provably preclude or significantly inhibit effective, reliable amateur radio communications. The ARRL acknowledges that local authorities can regulate amateur installations to insure the safety and health of persons in the community, but believes that those regulations cannot be so restrictive that they preclude effective amateur communications.

2. Interested parties were advised that they could file comments in the matter.[1] With extension, comments were due on or before December 26, 1984[2], with reply comments due on or before January 25, 1985.[3] Over sixteen hundred comments were filed.

Local Ordinances

3. Conflicts between amateur operators regarding radio antennas and local authorities regarding restrictive ordinances are common. The amateur operator is governed by the regulations contained in Part 97 of our rules. Those rules do not limit the height of an amateur antenna but they require, for aviation safety reasons, that certain FAA notification and FCC approval procedures must be followed for antennas which exceed 200 feet in height above ground level or antennas which are to be erected near airports. Thus, under FCC rules some amateur antenna support structures require obstruction marking and lighting. On the other hand, local municipalities or governing bodies frequently enact regulations limiting antennas and their support structures in height and location, e.g. to side or rear yards, for health, safety or aesthetic considerations. These limiting regulations can result in conflict because the effectiveness of the communications that emanate from an amateur radio station are directly dependent upon the location and the height of the antenna. Amateur operators maintain that they are precluded from operating in certain bands allocated for their use if the height of their antennas is limited by a local ordinance.

4. Examples of restrictive local ordinances were submitted by several amateur operators in this proceeding. Stanley J. Cichy, San Diego, California, noted that in San Diego amateur radio antennas come under a structures ruling which limits building heights to 30 feet. Thus, antennas there are also limited to 30 feet. Alexander Vrenios, Mundelein, Illinois wrote that an ordinance of the Village of Mundelein provides that an antenna must be a distance from the property line that is equal to one and one-half times its height. In his case, he is limited to an antenna tower for his amateur station just over 53 feet in height.

5. John C. Chapman, an amateur living in Bloomington, Minnesota, commented that he was not able to obtain a building permit to install an amateur radio antenna exceeding 35 feet in height because the Bloomington city ordinance restricted "structures" heights to 35 feet. Mr. Chapman said that the ordinance, when written, undoubtedly applied to buildings but was now being applied to antennas in the absence of a specific ordinance regulating them. There were two options open to him if he

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[1] Public Notice, August 30, 1984, Mimeo. No. 6299, 49 F.R. 36113, September 14, 1984.

[2] Public Notice, December 19, 1984, Mimeo No. 1498.

[3] Order, November 8, 1984, Mimeo. No. 770.

wanted to engage in amateur communications. He could request a variance to the ordinance by way of a hearing before the City Council, or he could obtain affidavits from his neighbors swearing that they had no objection to the proposed antenna installation. He got the building permit after obtaining the cooperation of his neighbors. His concern, however, is that he had to get permission from several people before he could effectively engage in radio communications for which he had a valid FCC amateur license.

6. In addition to height restrictions, other limits are enacted by local jurisdictions—anti-climb devices on towers or fences around them; minimum distances from high voltage power lines; minimum distances of towers from property lines; and regulations pertaining to the structural soundness of the antenna installation. By and large, amateurs do not find these safety precautions objectionable. What they do object to are the sometimes prohibitive, non-refundable application filing fees to obtain a permit to erect an antenna installation and those provisions in ordinances which regulate antennas for purely aesthetic reasons. The amateurs contend, almost universally, that "beauty is in the eye of the beholder." They assert that an antenna installation is not more aesthetically displeasing than other objects that people keep on their property, e.g. motor homes, trailers, pick-up trucks, solar collectors and gardening equipment.

Restrictive Covenants

7. Amateur operators also oppose restrictions on their amateur operations which are contained in the deeds for their homes or in their apartment leases. Since these restrictive covenants are contractual agreements between private parties, they are not generally a matter of concern to the Commission. However, since some amateurs who commented in this proceeding provided us with examples of restrictive covenants, they are included for information. Mr. Eugene O. Thomas of Hollister, California included in his comments an extract of the Declaration of Covenants and Restrictions for Ridgemark Estates, County of San Benito, State of California. It provides:

> No antenna for transmission or reception of radio signals shall be erected outdoors for use by any dwelling unit except upon approval of the Directors. No radio or television signals or any other form of electromagnetic radiation shall be permitted to originate from any lot which may unreasonably interfere with the reception of television or radio signals upon any other lot.

Marshall Wilson, Jr. provided a copy of the restrictive covenant contained in deeds for the Bell Martin Addition #2, Irving, Texas. It is binding upon all of the owners or purchasers of the lots in the said addition, his or their heirs, executors, administrators or assigns. It reads:

> No antenna or tower shall be erected upon any lot for the purposes of radio operations.

William J. Hamilton resides in an apartment building in Gladstone, Missouri. He cites a clause in his lease prohibiting the erection of an antenna. He states that he has been forced to give up operating amateur radio equipment except a hand-held 2 meter (144-148 MHz) radio transceiver. He maintains that he should not be penalized just because he lives in an apartment.

Other restrictive covenants are less global in scope than those cited above. For example, Robert Webb purchased a home in Houston, Texas. His deed restriction prohibited "transmitting or receiving antennas extending above the roof line."

8. Amateur operators generally oppose restrictive covenants for several reasons. They maintain that such restrictions limit the places that they can reside if they want to pursue their hobby of amateur radio. Some state that they impinge on First Amendment rights of free speech. Others believe that a constitutional right is being abridged because, in their view, everyone has a right to access the airwaves regardless of where they live.

9. The contrary belief held by housing subdivision communities and condominium or homeowner's associations is that amateur radio installations constitute safety hazards, cause interference to other electronic equipment which may be operated in the home (televisions, radio, stereos) or are eyesores that detract from the aesthetic and tasteful appearance of the housing development or apartment complex. To counteract these negative consequences, the subdivisions and associations include in their deeds, leases or by-laws restrictions and limitations on the location and height of antennas or, in some cases, prohibit them altogether. The restrictive covenants are contained in the contractual agreement entered into at the time of the sale or lease of the property. Purchasers or lessees are free to choose whether they wish to reside where such restrictions on amateur antennas are in effect or settle elsewhere.

Supporting Comments

10. The Department of Defense (DOD) supported the ARRL and emphasized in its comments that continued success of existing national security and emergency preparedness telecommunications plans involving amateur stations would be severely diminished if state and local ordinances were allowed to prohibit the construction and usage of effective amateur transmission facilities. DOD utilizes volunteers in the Military Affiliate Radio Service (MARS)[4], Civil Air Patrol (CAP) and the Radio

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[4] MARS is solely under the auspices of the military which recruits volunteer amateur operators to render assistance to it. The Commission is not involved in the MARS program.

Amateur Civil Emergency Service (RACES). It points out that these volunteer communicators are operating radio equipment installed in their homes and that undue restrictions on antennas by local authorities adversely affect their efforts. DOD states that the responsiveness of these volunteer systems would be impaired if local ordinances interfere with the effectiveness of these important national telecommunication resources. DOD favors the issuance of a ruling that would set limits for local and state regulatory bodies when they are dealing with amateur stations.

11. Various chapters of the American Red Cross also came forward to support the ARRL's request for a preemptive ruling. The Red Cross works closely with amateur radio volunteers. It believes that without amateurs' dedicated support, disaster relief operations would significantly suffer and that its ability to serve disaster victims would be hampered. It feels that antenna height limitations that might be imposed by local bodies will negatively affect the service now rendered by the volunteers.

12. Cities and counties from various parts of the United States filed comments in support of the ARRL's request for a Federal preemption ruling. The comments from the Director of Civil Defense, Port Arthur, Texas are representative:

> The Amateur Radio Service plays a vital role with our Civil Defense program here in Port Arthur and the design of these antennas and towers lends greatly to our ability to communicate during times of disaster.
>
> We do not believe there should be any restrictions on the antennas and towers except for reasonable safety precautions. Tropical storms, hurricanes and tornadoes are a way of life here on the Texas Gulf Coast and good communications are absolutely essential when preparing for a hurricane and even more so during recovery operations after the hurricane has past.

13. The Quarter Century Wireless Association took a strong stand in favor of the issuance of a declaratory ruling. It believes that Federal preemption is necessary so that there will be uniformity for all Amateur radio installations on private property throughout the United States.

14. In its comments, the ARRL argued that the Commission has the jurisdiction to preempt certain local land use regulations which frustrate or prohibit amateur radio communications. It said that the appropriate standard in preemption cases is not the extent of state and local interest in a given regulation, but rather the impact of that regulation on Federal goals. Its position is that Federal preemption is warranted whenever local governmental regulations relate adversely to the operational aspects of amateur communication. The ARRL maintains that localities routinely employ a variety of land use devices to preclude the installation of effective amateur antennas, including height restrictions, conditional use permits, building setbacks and dimensional limitations on antennas. It sees a declaratory ruling of Federal preemption as necessary to cause

municipalities to accommodate amateur operator needs in land use planning efforts.

15. James C. O'Connell, an attorney who has represented several amateurs before local zoning authorities, said that requiring amateurs to seek variances or special use approval to erect reasonable antennas unduly restricts the operation of amateur stations. He suggested that the Commission preempt zoning ordinances which impose antenna height limits of less than 65 feet. He said that this height would represent a reasonable accommodation of the communication needs of most amateurs and the legitimate concerns of local zoning authorities.

Opposing Comments

16. The City of La Mesa, California has a zoning regulation which controls amateur antennas. Its comments reflected an attempt to reach a balanced view.

> This regulation has neither the intent, nor the effect, of precluding or inhibiting effective and reliable communications. Such antennas may be built as long as their construction does not unreasonably block views or constitute eyesores. The reasonable assumption is that there are always alternatives at a given site for different placement, and/or methods for aesthetic treatment. Thus, both public objectives of controlling land use for the public health, safety, and convenience, and providing an effective communications network, can be satisfied.
>
> A blanket ruling to completely set aside local control, or a ruling which recognizes control only for the purpose of safety of antenna construction, would be contrary to ... legitimate local control.

17. Comments from the County of San Diego state:

> While we are aware of the benefits provided by amateur operators, we oppose the issuance of a preemption ruling which would elevate 'antenna effectiveness' to a position above all other considerations. We must, however, argue that the local government must have the ability to place reasonable limitations upon the placement and configuration of amateur radio transmitting and receiving antennas. Such ability is necessary to assure that the local decision-makers have the authority to protect the public health, safety and welfare of all citizens.
>
> In conclusion, I would like to emphasize an important difference between your regulatory powers and that of local governments. Your Commission's approval of the preemptive requests would establish a 'national policy'. However, any regulation adopted by a local jurisdiction could be overturned by your Commission or a court if such regulation was determined to be unreasonable.

18. The City of Anderson, Indiana, summarized some of the problems that face local communities:

> I am sympathetic to the concerns of these antenna owners and I understand that to gain the maximum reception from their devices, optimal location is necessary. However, the preservation of residential zoning districts as 'liveable' neighborhoods is jeopardized by placing these antennas in front yards of homes. Major problems of public safety have been encountered, particularly vision blockage for auto and pedestrian access. In addition, all communities are faced with various building lot sizes. Many building lots are so small that established setback requirements (in order

> to preserve adequate air and light) are vulnerable to the unregulated placement of these antennas.
>
> . . . the exercise of preemptive authority by the FCC in granting this request would not be in the best interest of the general public.

19. The National Association of Counties (NACO), the American Planning Association (APA) and the National League of Cities (NLC) all opposed the issuance of an antenna preemption ruling. NACO emphasized that federal and state power must be viewed in harmony and warns that Federal intrusion into local concerns of health, safety and welfare could weaken the traditional police power exercised by the state and unduly interfere with the legitimate activities of the states. NLC believed that both Federal and local interests can be accommodated without preempting local authority to regulate the installation of amateur radio antennas. The APA said that the FCC should continue to leave the issue of regulating amateur antennas with the local government and with the state and Federal courts.

Discussion

20. When considering preemption, we must begin with two constitutional provisions. The tenth amendment provides that any powers which the constitution either does not delegate to the United States or does not prohibit the states from exercising are reserved to the states. These are the police powers of the states. The Supremacy Clause, however, provides that the constitution and the laws of the United States shall supersede any state law to the contrary. Article III, Section 2. Given these basic premises, state laws may be preempted in three ways: First, Congress may expressly preempt the state law. See *Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977). Or, Congress may indicate its intent to completely occupy a given field so that any state law encompassed within that field would implicitly be preempted. Such intent to preempt could be found in a congressional regulatory scheme that was so pervasive that it would be reasonable to assume that Congress did not intend to permit the states to supplement it. See *Fidelity Federal Savings & Loan Ass'n v. de la Cuesta,* 458 U.S. 141, 153 (1982). Finally, preemption may be warranted when state law conflicts with federal law. Such conflicts may occur when "compliance with both Federal and state regulations is a physical impossibility," *Florida Lime & Avocado Growers, Inc. v. Paul,* 373 U.S. 132, 142, 143 (1963), or when state law "stands as an obstacle to the accomplishment and execution of full purposes and objectives of Congress," *Hines v. Davidowitz,* 312 U.S. 52, 67 (1941). Furthermore, federal regulations have the same preemptive effect as federal statutes. *Fidelity Federal Savings & Loan Association v. de la Cuesta, supra.*

21. The situation before us requires us to determine the extent to which state and local zoning regulations may conflict with federal policies concerning amateur radio operators.

22. Few matters coming before us present such a clear dichotomy of viewpoint as does the instant issue. The cities, counties, local communities and housing associations see an obligation to all of their citizens and try to address their concerns. This is accomplished through regulations, ordinances or covenants oriented toward the health, safety and general welfare of those they regulate. At the opposite pole are the individual amateur operators and their support groups who are troubled by local regulations which may inhibit the use of amateur stations or, in some instances, totally preclude amateur communications. Aligned with the operators are such entities as the Department of Defense, the American Red Cross and local civil defense and emergency organizations who have found in Amateur Radio a pool of skilled radio operators and a readily available backup network. In this situation, we believe it is appropriate to strike a balance between the federal interest in promoting amateur operations and the legitimate interests of local governments in regulating local zoning matters. The cornerstone on which we will predicate our decision is that a reasonable accommodation may be made between the two sides.

23. Preemption is primarily a function of the extent of the conflict between federal and state and local regulation. Thus, in considering whether our regulations or policies can tolerate a state regulation, we may consider such factors as the severity of the conflict and the reasons underlying the state's regulations. In this regard, we have previously recognized the legitimate and important state interests reflected in local zoning regulations. For example, in Earth Satellite Communications, Inc., 95 FCC 2d 1223 (1983), we recognized that

> . . . countervailing state interests inhere in the present situation . . . For example, we do not wish to preclude a state or locality from exercising jurisdiction over certain elements of an SMATV operation that properly may fall within its authority, such as zoning or public safety and health, provided the regulation in question is not undertaken as a pretext for the actual purpose of frustrating achievement of the preeminent federal objective and so long as the non-federal regulation is applied in a nondiscriminatory manner.

24. Similarly, we recognize here that there are certain general state and local interests which may, in their even-handed application, legitimately affect amateur radio facilities. Nonetheless, there is also a strong federal interest in promoting amateur communications. Evidence of this interest may be found in the comprehensive set of rules that the Commission has adopted to regulate the amateur service.[5] Those rules set

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[5] 47 CFR Part 97.

forth procedures for the licensing of stations and operators, frequency allocations, technical standards which amateur radio equipment must meet and operating practices which amateur operators must follow. We recognize the Amateur radio service as a voluntary, noncommercial communication service, particularly with respect to providing emergency communications. Moreover, the amateur radio service provides a reservoir of trained operators, technicians and electronic experts who can be called on in times of national or local emergencies. By its nature, the Amateur Radio Service also provides the opportunity for individual operators to further international goodwill. Upon weighing these interests, we believe a limited preemption policy is warranted. State and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted.

25. Because amateur station communications are only as effective as the antennas employed, antenna height restrictions directly affect the effectiveness of amateur communications. Some amateur antenna configurations require more substantial installations than others if they are to provide the amateur operator with the communications that he/she desires to engage in. For example, an antenna array for international amateur communications will differ from an antenna used to contact other amateur operators at shorter distances. We will not, however, specify any particular height limitation below which a local government may not regulate, nor will we suggest the precise language that must be contained in local ordinances, such as mechanisms for special exceptions, variances, or conditional use permits. Nevertheless, local regulations which involve placement, screening, or height of antennas based on health, safety, or aesthetic considerations must be crafted to accommodate reasonably amateur communications, and to represent the minimum practicable regulation to accomplish the local authority's legitimate purpose.[6]

26. Obviously, we do not have the staff or financial resources to review all state and local laws that affect amateur operations. We are confident, however, that state and local governments will endeavor to legislate in a manner that affords appropriate recognition to the important federal interest at stake here and thereby avoid unnecessary conflicts with federal policy, as well as time-consuming and expensive litigation in this area. Amateur operators who believe that local or state governments have been overreaching and thereby have precluded accomplishment of their legitimate communications goals, may, in addition, use this document to bring our policies to the attention of local tribunals and forums.

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[6] We reiterate that our ruling herein does not reach restrictive covenants in private contractual agreements. Such agreements are voluntarily entered into by the buyer or tenant when the agreement is executed and do not usually concern this Commission.

27. Accordingly, the Request for Declaratory Ruling filed July 16, 1984, by the American Radio Relay League, Inc., IS GRANTED to the extent indicated herein and, in all other respects, IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

Equipment Authorization
Low Power Communication Devices
Radio Frequency Devices, Marketing

Notice of Proposed Rule Making adopted to establish rules for the operation of perimeter protection systems on TV channels 2 through 6. The perimeter protection system will operate on TV channels 2 through 6 and be limited to the same radiation limits as personal computing devices (Class B). The perimeter protection system will be used to prevent unauthorized exit or entry at penitentiaries, nuclear power plants, or other secure facilities.
—*Amendment of Part 15*
Gen Docket No. 85-231

FCC 85-427

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of

Amendment of Part 15, Subpart F, to permit operation of field disturbance sensors in the band 54 to 72, and 76 to 88 MHz	Gen Docket No. 85-231 RM-4824

NOTICE OF PROPOSED RULE MAKING

Adopted: July 30, 1985; Released: August 5, 1985

BY THE COMMISSION:

Introduction

1. This Notice of Proposed Rule Making is issued in response to a petition for rule making[1] submitted by Control Data Canada, Ltd. (CDC), requesting an amendment of Part 15, Subpart F, to authorize the operation of a wideband coupled transmission line filed disturbance sensor (CTLFDS) in the frequency band 50-88 MHz.[2] The petition was put on

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[1] (Petition filed on June 28, 1984)

[2] At the same time, CDC also filed a petition for waiver so that it could immediately market and operate its newly developed perimeter protection system. The petition for waiver was put on public notice on August 21, 1984, Public Notice No. 6131.

public notice on July 13, 1984.[3] The Commission received comments from RCA Corporation (RCA), to which CDC filed reply comments.

2. CDC has developed a CTLFDS, denoted as "GUIDAR," that can be used to provide security surveillance for prisons and to protect high risk sites such as nuclear power stations from terrorism, theft, and vandalism. GUIDAR operates on a principle of guided radar whereby a detection zone is created between "leaky" or ported coaxial cables deployed around the protected area. The present system employs two cables in parallel that are buried approximately five feet apart and nine inches below the ground. A radio frequency (RF) pulse is transmitted into one of the cables and some of the energy is coupled via the ports or holes in the outer conductor into the ground and air near the cable. Some of this energy is reflected from objects in the ground and discontinuities in the soil, and is coupled into the second or receiving cable. When a human or other large object crosses between the cables, the change in the electromagnetic energy coupled from one cable to the other is detected and thereby triggers an alarm. It is possible for such systems to cover a perimeter up to two miles in length. The present system requires the use of line amplifiers if the cables are more than a half mile long. This is necessary to maintain a uniform signal for the entire system.

3. CDC indicated that the ability of the system to detect actual intrusions and to ignore objects that could cause a false alarm is affected by the frequency of operation. At frequencies below 30 MHz, sensitivity to humans drops dramatically. Operation at frequencies above 100 MHz increases the system's sensitivity to small animals, resulting in numerous false alarms. Also, at frequencies above 100 MHz the signal loss of the cable becomes significant. In light of these constraints, CDC states that such systems must operate somewhere between about 30 and 100 MHz.

4. Perimeter protection systems are included in a special category of devices termed field disturbance sensors, which are governed by the rules in Part 15, Subpart F.[4] These rules permit operation of a perimeter protection system in the band 40.66 to 40.70 MHz.[5] CDC contends that this

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[3] (Public Notice No. 1468)

[4] A field disturbance sensor is defined in Section 15.4(j)(1) as follows: "A restricted radiation device which establishes a radio frequency field in its vicinity and detects changes in that field resulting from movement of persons or objects within the radio frequency field." A perimeter protection system is defined in Section 15.4(j)(2) as follows: "A perimeter protection system is a field disturbance sensor which uses buried leaky cables installed around a facility to detect any unauthorized entry or exit. Its use is limited to commercial and industrial locations away from residential areas."

[5] The rules for field disturbance sensors provide for operation in a number of frequency bands, and aside from the frequency band at 40 MHz, none of the bands are in or near the region where CDC says its systems must operate, namely, between 30 and 100 MHz. A field disturbance sensor may alternatively be operated on any frequency, subject to the condition that emissions may not exceed 15 uV/m at a distance of (2)/2π [equivalent in

band is not sufficiently wide to permit operation of a system such as GUIDAR. The GUIDAR system utilizes a pulsed signal which results in an emission with a bandwidth of 2.5 MHz, considerably more than the .04 MHz bandwidth permitted at 40 MHz. A pulsed signal is employed in order to be able to detect the exact location along the perimeter where the intrusion has occurred.

5. CDC proposes that the provisions for perimeter protection systems be expanded to permit operation anywhere between 50 and 88 MHz. It is unclear why CDC has selected the segment 50 to 88 MHz rather than 30 to 50, or 88 to 100 MHz. Briefly, this region of the spectrum is allocated as follows: 30-50 MHz — land mobile; 50-54 MHz — amateur radio; 54-72 MHz — TV channels 2 through 4; 72-76 MHz — radio astronomy and aeronautical navigation; 76-88 MHz — TV channels 5 and 6; and, 88-100 MHz — FM broadcast. The table of frequency allocations in Part 2 of the Rules should be consulted for details. One factor influencing the request was that such systems are susceptible to high field strengths, which are employed in the land mobile service in the range 30 to 50 MHz. While high signal levels also exist in the TV bands, this potential problem is avoidable because the perimeter protection system can be set to operate on a vacant channel and TV transmitters are fixed in location. CDC contends that perimeter protection systems can operate in the band 50 to 88 MHz without causing interference to the radio services in this region, provided that radiated emissions are limited to 12 uV/m measured at a distance of 30 meters from any part of the system. This proposal is apparently based on the operating characteristics of the GUIDAR system. CDC notes that its proposed limit is less than the level of radio noise permitted in Part 15, Subpart J, for Class A, or commercial, computer equipment, which is subject to a limit of 30 uV/m at 30 meters in the subject frequency range. CDC also recommends a power line conducted limit of 250 uV over the frequency range of 450 kHz to 30 MHz.

6. CDC performed extensive tests to demonstrate that the proposed limits for wideband sensors will not cause interference to TV operation on the lower VHF channels. Due to the variations in background noise and the field strength levels of TV signals, CDC performed tests under controlled laboratory environmental conditions to determine the interference potential of CTLFDS. CDC asserts that the tests demonstrate that the possibility of discernible interference to TV reception in urban, suburban or rural locations under either Grade A or Grade B reception is unlikely. CDC has also been operating the GUIDAR system since January 26, 1983, at two locations in the U.S. under experimental licenses granted

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feet to 157/f(in MHz)] from the sensor; however, as a practical matter, since the effective emission level becomes more stringent as frequency increases, most operation under this requirement is only feasible at frequencies below about 2 MHz.

by the Commission.[6] In addition, the system has been in operation since 1978 at various penitentiaries in Canada. CDC claims that there has not been a single complaint of GUIDAR interfering with a television receiver or any other communications device. CDC states that it was not necessary to perform interference tests for the non-TV services in light of a report submitted to the Commission by the Computer Business Equipment Manufacturers Association (CBEMA)[7] showing that computer equipment, emitting at the higher levels than requested by CDC, did not cause interference to other services.

7. RCA Corporation (RCA) suggested that the operation of such devices be restricted to 100 meters from residential areas. CDC, in its reply comments, agreed that the operation of these devices could be restricted to 100 meters or more from residential areas. RCA also commented that measurements on just one or just a few installations should not be considered sufficient assurance that the system will comply with the emission limits wherever it is installed. RCA speculates that the level of emissions will vary depending on how the system is installed and the physical characteristics of the facility. Therefore, RCA asserts that every installation should be tested individually to determine compliance.

Discussion

8. The principal benefit to be gained in expanding our current provisions for perimeter protection systems would be to permit use of more sophisticated systems, e.g. systems that can detect precisely where an intrusion has occurred. In view of the public benefits to be derived from improved security at facilities such as prisons and nuclear plants, we find it appropriate to accommodate such systems to the extent possible.

9. Of all the radio services in the frequency range in which such systems might possibly operate, it appears that the least likely chance of interference occurring would be to permit the operation of perimeter protection systems on vacant TV broadcast channels 2 thru 6. We have reservations about also permitting these systems to operate in the 50-54 MHz amateur radio band because these systems could extend for considerable distance around the perimeter of a large facility, thereby increasing the likelihood that an amateur transmitter could come in close proximity to some part of the system. As for the band 72-76 MHz band, the radio astronomy and aeronautical navigation services operating in this band attempt to receive very weak signals and therefore could not tolerate even small levels of interfering signals from CTLFDS. Beyond these concerns, we note that CDC has not explained why the entire range

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[6] The two locations are Gracie Mansion, the official residence of the Mayor of New York, and Rikers Island, a correctional facility in New York City.

[7] (See Petition, page 23)

50 to 88 MHz is needed; its system employs a signal only 2.5 MHz wide. Permitting operation on TV channels 2 thru 6 should be more than sufficient since this ensures that in any given area there will be at least two vacant TV channels on which a perimeter protection system could be set to operate, with two channels allowing for the eventuality where circumstances call for two systems to be set up side by side.

10. We do not feel that the emissions standards should be based on the operating characteristics of a given manufacturer's system; rather, we wish to focus on the standards that are appropriate for controlling interference. We note CDC's reference to the standards in Part 15, Subpart J, governing radio noise from computer equipment. The criteria used to develop the computing device limits are in many ways similar to the situation presented here. We agree that those standards may have relevance to interference control for CTLFDS, although with computers we were dealing with point sources of radiation. Here we are dealing with what, in effect, is a distributed antenna system. In the frequency range of interest here, our standard for equipment used in a business or industrial environment (Class A equipment) is 30 uV/m at a distance of 30 meters from the equipment; our standard for equipment used in a residential environment is equivalent to 10 uV/m at 30 meters. The limits are different because industrial equipment is assumed to be generally located farther away from potential victim receivers than residential equipment. The Class A limits provide interference protection at separation distances of 30 meters or greater and the Class B limits provide interference protection at distances of 10 meters or greater. The question is, which standard is more appropriate for CTLFDS?

11. The present definition of a perimeter protection system restricts such systems to use in "commercial or industrial location away from residential areas." In fact, the applications that CDC describes for this system fall within this definition and can be characterized as operating in industrial locations. However, we can envision this same technology eventually being used for residential security systems and possibly being mass marketed. The establishment of a two tiered limit for residential vs. industrial equipment, as we have done for computers, may not be appropriate for CTLFDS. Unlike computers, there would probably be, in practice, very little to distinguish an industrial from a residential CTLFDS system. We see little reason to preclude use of such systems in residential areas. Accordingly, in order to ensure that such systems can be installed in any location with little risk of interference, we are proposing to modify the definition of a perimeter protection system to remove the restriction against residential operation and we are proposing the more stringent limit of 10 uV/m at 30 meters. This is the same limit that we permit for Class B computing devices. The proposed limit is only slightly less than

the 12 uV/m at 30 meters requested by CDC and with so small a change we expect that the system could easily be designed for compliance and still function properly. Furthermore, the 10 uV/m standard is consistent with existing standards and because it has proven satisfactory in residential areas. In addition, the operation of perimeter protection systems is limited to vacant TV channels. As to RCA's suggestion to require systems to be located 100 meters from residential areas, such a requirement is superfluous in light of our proposal and, in any event, would probably prove unenforceable.

12. Since we are not proposing any specific modulation or bandwidth for systems operating in the proposed bands, many new products may be developed. We are proposing certification as the equipment authorization procedure in order to gain experience and confidence that this equipment can be expected to meet the standards. Currently, all field disturbance sensors and most low power communications devices operating under Part 15 are subject to certification. We see no reason to deviate from this policy in this instance.

13. When we originally established rules for perimeter protection systems in the Report and Order in Docket 82-827[8], we restricted such systems to use of buried cable. The reason for this restriction was concern about variations in performance of the system at different heights above ground. At that time, we indicated that we would revisit this issue in a future proceeding. In its Petition for Rule Making, CDC envisions several methods for mounting coupled transmission lines including buried cables, air mounted cables, and combinations of the two methods. Rather than address this issue in a separate proceeding, we are proposing that the definition of perimeter protection systems be changed to permit above ground installations.

14. We are proposing that the measurement procedures described in Section 15.234 be used for perimeter protection systems operating in the proposed bands with only a few revisions as shown in the Appendix. The current procedures require that the frequency stability, bandwidth, and RF power output be measured at the transmitter or at each repeater (line amplifier). Since many of these systems will probably be buried, it may be difficult to measure emissions at these locations. Therefore, we are proposing that these measurements be made at four equally spaced locations along the cable whenever it is not possible or practical to make the measurements at the transmitter or repeaters in order to simplify the measurement procedure used to certify the system. This would apply to all perimeter protection systems operating in the lower VHF bands.

15. Since we are proposing to permit the operation of CTLFDS above ground, which may also include a combination of above and below ground

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[8] (See the Report and Order in Docket 82-827, 49 FR 35634)

installations, we specifically request comments on the measurement procedures that should be used to certify these systems. If a system has cables installed above ground or with a combination of above and below ground installations, is the current procedure of testing at three installations sufficient? If not, how many configurations should be tested? RCA's suggestion to require tests of every individual system would clearly represent a significant burden on manufacturers. Should the Commission require the manufacturer to specify the type of installation in the instruction manual, and add a note to the certification grant indicating the type of installation permitted? CDC indicated that it had observed some unusual effects when cables are brought very close to a dielectric interface. Cables lying on the surface are located at the interface between two dielectrics (air and soil). CDC believes that cable should not be tested lying on the ground, and air mounted cables should be tested at the height at which they are intended to be used. We request comments on the installation and measurement procedures to be used for systems having cables installed above ground or a combination of above and below ground. In addition, we specifically request comments on the effect that the ground conductivity may have on such measurements.

16. CDC requested that the field intensity measurement instrument have a quasi-peak detector function rather than a peak detector function. Measurements for perimeter protection systems operating in the 40.66 to 40.70 MHz band are presently made with a peak detector; however, measurements of computer noise are current made using a quasi-peak detector. The quasi-peak detector is weighted to correlate roughly with the interference effect of broadband emissions on receivers, particularly TV receivers. Since we are proposing operation of these systems in TV bands under the same limits used for residential computers, use of a quasi-peak detector is more appropriate and we therefore are proposing its use.

Procedural Matters

17. Pursuant to the Regulatory Flexibility Act of 1980, 5 U.S.C. 601 et seq. the Commission issues the following initial regulatory flexibility analysis:

I. Reason for action

CDC filed a petition requesting that the Commission permit the operation of perimeter protection systems in the lower VHF frequency band.

II. The objective

The Commission is proposing to allow operation of perimeter protection systems in the 54-72 MHz, and 76-88 MHz frequency bands.

III. Legal basis

Action proposed is in accordance with Sections 4(i), 302(a), 303(g), and 303(r) of the Communications Act of 1934, as amended.

IV. Entities affected; nature of economic impact; significant alternatives

The proposal expands Part 15 of the FCC Rules by providing for operation of perimeter protection systems in the new frequency bands. All manufacturers can benefit from this expansion. With respect to existing users of the bands, we received no adverse comments on the operation of perimeter protection systems.

V. Recording, record-keeping and other compliance requirements

The proposal contained herein has been analyzed with respect to the Paperwork Reduction Act of 1980. There are no changes in the forms, information collection, record keeping, labeling, disclosure, or record retention requirements. Therefore, there are no changes to the burden hours imposed on the public.

18. For purposes of this non-restricted notice and comment rule making proceeding, members of the public are advised that *ex parte* contacts are permitted from the time the Commission adopts a notice of proposed rule making until the time that a public notice is issued stating that a substantive disposition of the matter is to be considered at a forthcoming meeting. In general, an *ex parte* presentation is any written or oral communication (other than formal written comments/pleadings and formal oral arguments) between a person outside the Commission and a Commissioner or a member of the Commission's staff which addresses the merits of the proceeding. Any person who submits a written *ex parte* presentation must serve a copy of that presentation on the Commission's Secretary for inclusion in the public file. Any person who makes an oral *ex parte* presentation addressing matters not fully covered in any previously-filed written comments for the proceeding must prepare a written summary of that presentation; on the day of oral presentation, that written summary must be served on the Commission's Secretary for inclusion in the public file, with a copy to the Commission official receiving the oral presentation. Each *ex parte* presentation described above must state on its face that the Secretary has been served, and must also state by docket number the proceeding to which it relates. See generally, Section 1.1231 of the Commission's Rules 47 C.F.R. Section 1.1231.

19. Pursuant to the applicable procedures set forth in 1.415 and 1.419 of the Commission's Rules, interested parties may file comments on or before October 11, 1985, and reply comments on or before November 12, 1985. All relevant and timely comments will be considered before final

action is taken in this proceeding. To file formally in this proceeding, participants must file an original and five copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the Dockets reference Room (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554. For further information on this proceeding, contact the Office of Science & Technology, tel: (202) 653-8247.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

APPENDIX

Part 15, Subpart F is proposed to be amended as set forth below:

1. The authority citation for 47 CFR Part 15 continues to read as follows:

Authority: Secs. 4,303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303; Interpret or apply sec. 301, 48 Stat. 1081; 47 U.S.C. 301, unless otherwise noted.

2. Section 15.4 is amended by revising Subparagraph (j)(2) to read as follows:

* * * * *

(j) * * *

(1) * * * * *

(2) A perimeter protection system is a field disturbance sensor which uses leaky cables installed around an area to detect any unauthorized entry or exit.

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2. Section 15.310 is revised to read as follows:

Section 15.310 *Technical requirements for a perimeter protection system.*

(a) A perimeter protection system may operate on a frequency of 40.68 MHz ± 20 kHz, or in the frequency bands 54-72 MHz and 76-88 MHz. The frequency tolerance of the carrier frequency shall be ± 0.01% for systems operating on 40.68 MHz. This tolerance shall be maintained over the temperature range of –20° C to +50° C at normal supply voltage and for a variation in the primary supply voltage from 85 to 115% of the rated supply voltage at a temperature of +20° C.

(b) The field strength of the radiated emission from any part of the system shall not exceed the limits specified in the following subparagraphs when measured in accordance with the applicable procedures in Section 15.324 of this part.

(1) For systems operating on 40.68 MHz, the field strength on the fundamental carrier frequency shall not exceed 50 microvolts per meter (peak) at a distance of 30 meters. Harmonics and spurious emissions on frequencies outside the band 40.66 to 40.70 MHz shall not exceed 5 microvolts per meter (peak) at 30 meters.

(2) For systems operating in the 54 to 72 MHz and 76 to 88 MHz frequency bands, no emissions shall exceed 10 microvolts per meter (quasi-peak) at 30 meters within the band. Harmonics and spurious emissions on frequencies outside the band shall be 20 dB below the level of the unmodulated carrier.

NOTE: Operation in the 54 to 72 and 76 to 88 MHz frequency band must be on a vacant TV channel (channels 2 thru 6).

(c) For a perimeter protection system designed to be connected to a low voltage public utility power line, the powerline conducted emission shall not exceed 250 microvolts over the frequency range from 450 kHz to 30 MHz when measured in accordance with the procedure specified in FCC Measurement Procedure MP-4 entitled, "FCC Measurements of Radio Noise Emissions From Computing Devices."

3. Section 15.324 is amended by revising paragraphs (b) and (c), adding a new paragraph (d), and redesignating paragraphs (d) and (e) as (e) and (f) respectively to read as follows:

Section 15.324 *Measurement requirements for a perimeter protection system.*

* * * * *

(b) Emissions from the system shall be measured with a spectrum analyzer, radio noise meter, or other appropriate instrument. The 6 dB bandwidth of the instrument shall be not less than 100 kHz over the frequency range of 30 to 1000 MHz.

NOTE: A peak detector must be used for systems operating at 40.68 MHz. A quasi-peak detector must be used for systems operating in the 54-72 MHz, and 76-88 MHz frequency bands. See American National Standards Specifications for Electromagnetic-Interference and Field Strength Instrumentation, 10 kHz to 10 GHz, ANSI C63.2 (1980).

(c) For systems operating at 40.68 MHz, measurements of the frequency stability, bandwidth, and RF power output shall be made at the transmitter and each repeater, or at four equally spaced locations along the cable. The fundamental operating frequency, associated harmonics and spurious emissions within 30 dB of the level of the fundamental carrier shall be recorded. For measurement of radiated emissions, a calibrated tuned dipole or an appropriate broadband antenna shall be used. The antenna shall be varied in height and rotated for the measurement of horizontally or vertically polarized waves to obtain the maximum radiated emission at each frequency.

(d) For systems operating in the 54 to 72 and 76 to 88 MHz frequency band, measurement of the bandwidth and RF power output shall be made at the transmitter and each repeater, or at four equally spaced locations along the cable. Harmonics and spurious emissions within 20 dB of the level of the fundamental carrier shall be recorded. For measurement of harmonics and spurious emissions, use the peak value of the emission as shown on a spectrum analyzer.

* * * * *

Data Transmission

Report and Order adopted amending the rules to authorize TV stations to operate data and other communications services on vertical blanking interval (VBI) of TV video signal. This action expands teletext authority provided in Docket 81-741, 48 FR 27054, to permit additional VBI Communications services such as data transmission, computer software delivery, and paging.
—*Amendment of Parts 2, 73, And 76*
MM Docket No. 84-168

FCC 84-530

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of Amendment of Parts 2, 73, and 76 of the Commission's Rules to Authorize the Offering of Data Transmission Services on the Vertical Blanking Interval by TV Stations	MM Docket No. 84-168

REPORT AND ORDER

Adopted: November 8, 1984; Released: January 24, 1985

BY THE COMMISSION: COMMISSIONER RIVERA DISSENTING IN PART.

Introduction

1. By this *Report and Order*, the Commission is amending its rules to authorize television stations to operate data and other communications services on the vertical blanking interval (VBI) of the television video signal.[1] This action expands the teletext authority provided in Docket No. 81-741 to permit additional VBI communications services such as data transmission, computer software delivery, and paging.

Background

2. In authorizing teletext services on the VBI, the Commission defined teletext as "a data system for the transmission of textual and graphic

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[1] The vertical blanking interval is that portion of the television video signal that appears as a black bar when the picture rolls. Technically, it is lines 1-21 of field 1 and lines 1-20 and the first half of line 21 of field 2 of the video signal.

information intended for display on viewing screens."[2] While this definition of teletext provides for a wide range of service possibilities, it does preclude applications such as data transmission and paging. The Commission recognized that there was interest in using the VBI for these and other kinds of non-teletext services and indicated that it would consider initiation of a separate rule making to study authorization of other types of services on the VBI.[3]

3. Accordingly, on February 15, 1984, the Commission adopted a *Notice of Proposed Rule Making* (*Notice*) in the above captioned matter.[4] In the *Notice*, the Commission proposed a broad authority for use of the VBI for data services. As proposed, this authority would permit transmission of data, processed information, or any other communication in either a digital or analog mode. The Commission also proposed to apply the same policies and rules adopted for teletext to the new VBI authority.

4. Fourteen comments and five reply comments were received in response to the *Notice*. A list of the parties that submitted comments is provided in Appendix A.

Discussion

5. *Expanded VBI Authority*. The commenting parties were nearly unanimous in their support for the expanded VBI authority.[5] They agree with the Commission's initial assessment contained in the *Notice* that to broaden the range of services permitted on the VBI would encourage more efficient use of the spectrum and would afford the public a better opportunity to obtain communications services from a variety of sources. Several parties, including the Financial News Network (FNN) and the Public Broadcasting Service (PBS) expressed interest in developing new services that would be permissible under the expanded authority.[6]

6. We believe that the record establishes that authorization of expanded use of the VBI is in the public interest. Section 303(g) of the Communications Act, 47 U.S.C. §303(g), instructs the Commission to "study new uses for radio . . . and generally encourage the larger and more effective use of radio in the public interest." Authorization of television stations to transmit data and other services on the VBI is

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[2] *See, Report and Order*, BC Docket No. 81-741, 48 FR 27054, at para. 44.

[3] *Id.*, footnote 17.

[4] *See, Notice of Proposed Rule Making*, MM Docket No. 84-168, 49 FR 10556 (March 21, 1984).

[5] Several parties limited their comments to specific issues such as cable retransmission and thus did not address the basic question of whether to authorize expanded use of the VBI.

[6] FNN states that it is designing a data transmission system for delivery of business information and data via the VBI of both broadcast and cable facilities. PBS submits that public television stations are considering services ranging from distribution of computer software to individual schools to delivery of business data as possible uses of their VBI facilities.

consistent with this mandate. The expanded authority will provide new opportunities for the enlargement and enhancement of service on the television frequencies and thereby encourage more efficient use of the broadcast television spectrum. The interest in new VBI services expressed in the comments and the growing demand for data and paging services discussed in the *Notice* provide evidence that there is need for this authority. Moreover, as has been well demonstrated in the case of teletext, data signals on the VBI are compatible with existing broadcast transmission standards and can be transmitted without producing interference to other stations. Thus, the new authorization will provide a further expansion of broadcasters' service capabilities without adversely affecting or otherwise limiting the technical operation of other licensed services.

7. *Permitted VBI Services.* The consensus of the opinions expressed in the comments with respect to VBI services is that the Commission should provide broadcasters the maximum freedom to use their VBI facilities in the manner that best responds to the needs of the market. In this context, PBS, FNN, and NBC urge the Commission to establish the widest possible definition of "data services" to ensure that any form of digital or analog information can be transmitted. CBS believes, however, that the Commission should designate teletext as a primary service vis-a-vis VBI data services and that the authority to operate data services should be subject to the condition that such services not falsely enable alarm, priority, or other features of teletext decoders. Cybernetic Data Products, Inc. suggests that the Commission monitor the development of VBI services to ensure the widest possible range of uses of VBI facilities.

8. After reviewing the record on this matter, the Commission believes that VBI authority should be as expansive as possible. Accordingly, the Commission is amending its rules to provide licensees with the broadest possible discretion to select and define the services to be offered on the VBI. Under this authority, licensees will be permitted to transmit data, processed information, or any other communication in either digital or analog mode on the VBI. We will not protect particular uses of the VBI under this authority, such as teletext, nor will we place any other artificial limits on the use of the VBI.[7] With regard to paging services, we recognized that such services would be competitive with existing common carrier and private paging systems and therefore specifically sought comments on whether the public interest would be served by the introduction of additional competition in this area. Our examination

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[7] The Commission does not find it desirable to provide regulation to protect teletext, or any other VBI service as authorized in this *Report and Order*, from competing services. We believe it is more appropriate to permit licensees to make their own determinations with respect to how to manage competition between alternative services.

indicated that there was a definite need for additional paging services and that strong demand is expected to continue.[8] The comments generally support the use of the VBI for paging services but do not otherwise augment the record on this issue. Therefore, in view of the evidence of need for additional paging facilities and the absence of any indication of harm to the public interest from increased competition in this area, we are also permitting television licensees to use the VBI for paging services. Furthermore, to avoid any possible misinterpretations that might tend to limit the kinds of uses licensees would consider for their VBI facilities, services provided under the authority adopted in this proceeding hereinafter will be referred to categorically as "VBI telecommunications services."

9. In keeping with our intention to provide licensees with broad discretion in the use of the VBI, stations will be permitted to provide service under the expanded authority to the public at large, limited segments of the public with special interests, individual firms, organizations, and persons. The expanded authority will be granted to both full service and low power television stations,[9] and will permit private use, subscription service, business operation and conventional advertiser supported service.

Regulatory Structure for VBI Services.

10. Services provided under the new VBI authority will be considered ancillary or secondary to regular television program service consistent with the policy we have applied in the teletext, FM subcarrier and TV aural baseband subcarrier authorizations.[10]

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[8] As described in the *Notice*, the Commission documented the need for additional paging services in General Docket No. 80-183 (*Paging Systems-DPLMRS*, 89 FCC 2d 1337 (1980). We also noted that studies by Arthur D. Little in 1975 and Frost and Sullivan in 1978 indicated that there would be approximately three million pagers in use by 1985. To provide for this anticipated demand, we allocated forty additional paging channels each for private and common carrier paging systems (*See Report and Order* in CC Docket No. 80-189, 49 RR 2d 1541; *recon. granted in part*, 47 FR 34561; and *Second Report and Order* in Docket No. 19327, 47 FR 34568). However, both the Ad Hoc Private Paging Committee (AHPPC) and Telocator Network of America (Telocator) submitted that this allocation of eighty channels might not be adequate (Paging Systems-DPLMRS, *supra* at 1338). Finally, we noted that more than 5,500 applications have been filed so far in response to the lowband and 900 MHz allocations.

[9] Gerald A. Rosander asks the Commission to extend the authority for use of VBI to ITFS stations as a way to improve the use of ITFS facilities and to assist in meeting what he states is a growing need to deliver data to students, classrooms, and schools. The Commission is not acting on this request as it is outside the scope of the issues addressed in the *Notice*.

[10] *See, Report and Order* in BC Docket No. 81-741, supra; *WFTL, Inc.*, 45 FCC 2d 1152, 1153-54 (1974); *Greater Washington Telecommunications Assn., Inc.* 49 FCC 2d 848 (1974); *Second Report and Order* in Docket No. 21323, 49 FR 18100.

11. As stated in the *Notice*, the Commission considers use of the VBI for transmission of ancillary communications services to be a secondary privilege that runs with the broadcast television license. Thus, we will not entertain competing applications for use of these facilities. Nor will we require licensees to obtain additional approval for the stations technical facilities in cases where private carrier or common carrier service is offered.

12. Licensees will be permitted to engage in franchise/lease arrangements with third parties for use of the VBI. While such arrangements will not be subject to prior approval by the Commission, the licensee will be required to maintain a written copy of the agreement at the station to be available to the Commission upon its request. The Commission recognizes that there may be particular situations where broadcasters would have no interest in providing a service themselves due to lack of familiarity or experience in the area but would be willing to enter into arrangements with others who have the necessary knowledge and expertise to operate the service. We believe that the franchise/lease option will facilitate the initiation of new types of service and thereby will encourage the more effective use of the VBI.

13. *Private and Common Carrier Services.* — The Commission proposed to govern private and common carrier VBI services as either private carrier or common carrier activities under the same system of regulation as that incorporated into the rules for other ancillary service authorizations. The responses to this proposal were divided. ABC, the TV Licensees, and the Operating Telephone Companies endorse the proposed regulatory treatment of VBI service. They generally agree that the proposed approach: (1) provides maximum discretion for licensees to choose how VBI telecommunications services will be offered, (2) invokes common carrier regulation only to the extent necessary, (3) conforms to all applicable legal requirements as discussed in the *Notice*, and (4) places VBI services in a fair competitive relationship with other communications services. On the other side of this issue, the NAB, CBS, and NBC argue that the Commission should forbear from any common carrier regulation of VBI services. They contend that common carrier services would pose impediments to the development of VBI services. The NAB and NBC also ask the Commission to preempt state regulation of common carrier services. NBC submits that VBI and other ancillary services should be classified as "hybrid" and subject only to minimal regulation.

14. The Operating Telephone Companies caution that there may be a potential conflict between the VBI authorization and the outcome of the Commission's separate investigation of the extent and dangers of local

telephone bypass.[11] They contend that VBI services would create alternatives to telephone company services and thus create the very potential impact that the Commission is investigating in its bypass study.

15. After consideration of the record on this issue, the Commission has decided to regulate private and common carrier services under the expanded VBI authority in the manner proposed in the *Notice*. We find the nature and purpose of the VBI authority to be sufficiently similar to those of teletext, FM subcarriers, and TV aural subcarriers such that our determinations with respect to regulation of private and common carrier services under those authorizations are also appropriate to generalized use of the VBI. Moreover, we believe that the public interest will be served best by a policy that provides for consistent regulatory treatment under the separate ancillary service authorizations.

16. Under the approach we are extending to the VBI authority, specific services will not be classified as either private carrier or common carrier offerings. Instead, as we indicated in our teletext and FM subcarrier decisions[12], services other than land mobile activities are to be classified according to the criteria established by the Court in the *NARUC I* decision.[13] Factors which the Court found to be indicative of non-common carriage are:

1) The establishment of a medium-to-long term contractual relationships with customers,
2) A relatively stable clientele base,
3) Not holding out facilities indifferently, and
4) The selection of clients on a highly individualized basis.

For land mobile services such as paging, Section 331(c) of the Communications Act, 47 U.S.C. §331(c) establishes a demarcation between private and common carrier land mobile services. This distinction is based on the manner in which a multiple licensed or shared private land station is interconnected with a telephone exchange or interexchange service or facility.[14] The statute also makes it clear that private systems are exempt from state and local regulation, 47 U.S.C. §331(c)(3). The initial determination as to whether a particular service is private or common carriage under the above standards will be the responsibility of the licensee.

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[11] *See*, "Request for Data, Information and Studies Pertaining to Bypass of the Public Switched Network," Public Notice No. 3206, Released March 28, 1984.

[12] *See, Report and Order* in BC Docket No. 81-741, *supra*, paras. 61-68, and *First Report and Order* in BC Docket No. 82-536, *supra*, paras. 20-27.

[13] *See, National Association of Regulatory Utility Commissioner's* v. *FCC*, 525 F. 2d 630 (D.C. Cir. 1976), *cert. den'd.*, 425 U.S. 992 (1976).

[14] Section 331(c)(1) of the Act provides that "... private land mobile service shall include service provided by specialized mobile radio, multiple licensed radio dispatch systems, and all other radio dispatch systems, regardless of whether such service is provided indiscriminately to eligible users on a commercial basis, except that a land station licensed in such service to multiple licensees or otherwise shared by authorized users (other than a nonprofit, cooperative station) shall not be interconnected with a telephone exchange or interexchange service or facility for any purpose, except to the extent that:

17. Licensees intending to engage in VBI common carrier service will be required to obtain Commission authorization by filing an application in accordance with Part 21 or 22, as appropriate.[15] Public Notice will be given of each such request received, and a 30-day period will be afforded to all parties wishing to file comments or oppositions thereto. In seeking such authority, a television licensee will be in the same position, entitled to the same privileges, and subject to the same obligations as a traditional offeror of the service. As stated in the *First Report and Order* in BC Docket No. 82-536, our policy will be that "applications to provide common carrier services from qualified applicants will be granted unless there is some basis to believe that 'such a grant is likely to produce results that conflict with the goals of the Communications Act,' " *supra* at para. 25.

18. Licensees intending to provide private carrier VBI services will be required to notify the Licensing Division of the Private Radio Bureau at Gettysburg, Pennsylvania, 17325, by letter, prior to the initiation of service. The letter must certify that the VBI facilities will be used in this regard only for permissible services in accordance with Parts 90 and 94 of the Rules.[16] Licensees providing land mobile services must also certify that the service will only be offered to users eligible under Part 90 of the Rules and that any interconnection of the station with a telephone exchange or interexchange service or facility will be obtained in accordance with Section 331 of the Communications Act.[17] Such notification will not give rise to a comment period, and no separate authorization will be issued by the Commission. A television licensee offering private carrier services will be entitled to the same privileges, and subject to the same obligations and regulations as a traditional offeror of similar services.

19. Licensees intending to operate private carrier or common carrier services will not be required to obtain additional authorization for the technical facilities of the television station. This is consistent with our position that the authority for use of the VBI is a provision of the broadcast license. In cases where the licensee leases its VBI to a third party for a private or common carrier purpose, the lessee may be permitted to seek the appropriate service authorization. In all such cases of third party operation, the primary licensee of the television station will

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(a) each user obtains such interconnection directly from a duly authorized carrier; or (b) licensees jointly obtain such interconnection directly from a duly-authorized carrier."

[15] *See*, 47 FR Parts 21 and 22.

[16] *See*, 47 CFR Parts 90 and 94.

[17] The Commission's interpretation of the test in Section 331 of the Act is contained in our reconsideration of the *Second Report and Order* in Docket No. 20846, 89 FCC 2d 741. See *Memorandum Opinion and Order*, Docket No. 20846, 48 FR 29512 (June 27, 1983).

be held responsible for the technical operation of the transmitting facilities.

20. As discussed in the *Notice*, the Commission recognizes that there may be situations in which an operator of a service provided via the VBI could possibly have a competitive advantage over traditional offerors of similar services by virtue of the greater service area of some television stations and that this advantage might be particularly important in the market for paging services. We are also aware of the relationship of potential VBI services to the concerns we are investigating in the bypass study mentioned by the Operating Telephone Companies. However, we do not believe that authorizing television stations to operate common carrier services will adversely affect the public interest for several reasons. First, the VBI will be available for use by a wide range of disparate services and there is no indication that the industry will concentrate its use on paging or any other single service. Thus, it is likely that the number of stations operating a particular type of VBI service in a given market will be limited. The second consideration is that wide-area coverage is not necessarily more important to customers, particularly where there are differences in price and supplemental services among competitors.[18] A third factor specifically with respect to paging services is that there are many existing paging systems that operate wide-area systems that would be competitive with a VBI-based system. Finally, the comments provided no expression of concern from any existing service provider that there might be any adverse competitive effects from the operation of common carrier VBI services.

21. With respect to the presumption question, the Commission concludes that the facts and considerations in this matter are essentially the same as those addressed in our decision on this question for other broadcast ancillary service authorizations in a *Memorandum Opinion and Order* adopted April 26, 1984 (49 FR 19659) in BC Docket No. 82-536. In that decision we ruled that state regulation that has the effect of prohibiting or impeding entry of common carrier services provided through the facilities of teletext, FM subcarriers, or TV aural baseband subcarriers frustrates our federal objectives in authorizing such services and therefore should be preempted.[19] The preemption of state authority is limited at this juncture to regulation that affects entry. In view of the close parallel of the preemption issue in this proceeding to the issues addressed in our FM action, we will grant NAB and NBC's request that the Commission also preempt state regulation that has the effect of prohibiting or impeding entry to common carrier services operating under

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[18] *See, Cellular Communications Systems,* 86 FCC 2d 469, 485 (1981).

[19] *See,* FM subcarrier *Memorandum Opinion and Order, supra,* para. 17.

the VBI telecommunications authority.[20]

22. *Public Broadcasting Station Authority.* The Commission believes that the record supports authorization for public stations to operate a full range of telecommunications services on the VBI and to do so on either a commercial or non-commercial basis. We therefore will allow public television stations to use the VBI for ancillary telecommunications services in the manner as commercial broadcasters and to operate such services on a remunerative basis. This decision follows our similar action with respect to use of ancillary facilities by public broadcast stations in other proceedings and is intended to provide public television stations with opportunities to develop alternative sources of financing.[21]

23. *VBI Technical Rules.* In the *Notice,* the Commission proposed to apply the same technical rules adopted for teletext in BC Docket 81-741 to technical operation of services provided under the new VBI authority. These rules provide for signals on lines 14-18 and 20 of the VBI and permit licensees full discretion with respect to technical systems and signaling methods, subject only to the minimum constraints necessary to ensure that there is no interference to the originating station's primary service or to the service of other stations.[22] The commenting parties all agree that these rules are satisfactory and appropriate for continued application in the broader context of a general authorization for use of the VBI. In response to the Commission's request for information with respect to signaling methods that may be appropriate for specific services or VBI operations in general, the NAB submits that research in this area is at too early a stage to permit discussion and offers that a complete

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[20] On reconsideration of the FM Subcarrier *Memorandum Opinion and Order, supra,* we concluded that the public had been afforded adequate notice that we might decide to preempt state entry regulation. *See, Memorandum Opinion and Order,* in BC Docket No. 82-536, adopted November 8, 1984, FR. We also note that NAB and NBC commented on the regulatory matters raised in the instant *Notice of Proposed Rule Making* by requesting that we preempt state regulation. As in our FM Subcarrier proceeding, the commenters, in response to our proposal, raised the preemption issues when responding to the regulatory proposals contained in the *Notice.* Thus, the commenters had an opportunity to address the preemption issue. *See,* Comments of the National Association of Broadcasters at 3 and National Broadcasting Company at 5, 8; *see also,* Reply comments of Satellite Network Delivery Corporation at 2.

[21] *See, Report and Order* in Docket No. 81-741, *supra,* paras. 50-52; *see also, Second Report and Order* in Docket No. 21323, *supra,* para. 16.

[22] The constraints in the technical rules are that: 1) signal injection levels shall not exceed 80 IRE units on lines 15-18 and 20 or 40 IRE units on line 14 and 2) VBI signals shall not produce interference to the stations program service or to the service of other licensed stations. The signal level permitted on line 14 will increase gradually over time as receiver designs are modified to accommodate higher VBI signal levels. Lines 10-13 will also be phased-in for use over the next several years. These rules are set for in Appendix B, Section 73.682(a).

answer to this question should not be a prerequisite to use of the teletext rules for technical regulation of VBI services.

24. The technical regulations applied to teletext operation were designed to provide maximum flexibility in signaling methods. The record in this proceeding provides no indication that there are signaling methods for VBI operations in general that would necessitate more restrictive technical rules than those applied to teletext. Therefore, the Commission finds the technical rules adopted for teletext to be satisfactory for regulation of VBI services and will continue to rely on these rules to govern operation under the expanded authority.

25. *VBI Decoders*. External VBI decoders are expected to fall under the same two basic categories as teletext decoders. We believe that the current rules for teletext are adequate to cover these devices. The categories of devices and their associated treatment under Part 15 are:

(1) A VBI decoder that is separate from and external to a TV receiver and supplies a modulated RF signal to the antenna input terminals of the receiver is classified as a TV Interface Device, subject to certification under Subpart H of Part 15 of the rules.[23]

(2) A stand alone VBI decoder is subject to verification for compliance with Subpart C of Part 15 of the rules, whether or not it includes digital electronic processing for a function directly associated with the operation of the receiver (e.g., paging, scanning or programmability). However, if such a VBI decoder were to consist of a receiver or tuner in the same cabinet with a microprocessor having a function not directly associated with the operation of the receiver (e.g., a microprocessor for producing data for the input to a personal computer), the receiver and the microprocessor are considered separate equipment. In this case, receiver (or tuner) would be subject to verification under Subpart C of Part 15 and the microprocessor would be subject to the appropriate computing device requirements of Subpart J of Part 15.[24]

26. The treatment of decoders built-in to a TV receiver will depend on the arrangement of the receiver and decoder components. If the VBI signal is fed directly to the TV video amplifier circuits, the TV receiver requirements in Part 15, Subpart C apply to the entire unit. On the other hand, if the VBI signal is fed to the TV receiver front end, the decoder will be treated separately as an interface device. In either case, Sections 15.65 through 15.68 of the rules will not apply to VBI decoder circuitry, provided that a switch is included to permit reception of the normal television signal when the unit is not in the VBI mode.

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[23] In Docket No. 79-244, the rules regulating a Class I TV Device were replaced with new rules that renamed this kind of equipment a "TV Interface Device," revised the technical standards and changed the equipment approval requirement from type approval to certification. The *Report and Order* in this proceeding was adopted February 9, 1983 (48 FR 13029, published March 29, 1983).

[24] *See,* Public Notice dated March 7, 1984, titled "Clarification of Requirements for Receivers Combined with Computing Devices," FCC-3206.

27. *Cable Retransmission* — Commenting parties with broadcast and related interests all support some form of cable retransmission requirements for VBI services. PBS and the FNN argue for mandatory carriage of all VBI services. They submit that the absence of must carry protection for their VBI communications services will work hardships on their own organizations or those who use their services. Other broadcast parties, including the NAB, NBC and the TV Licensees, urge the Commission at a minimum to require cable carriage of teletext and other services that enhance regular programming or are intended for reception by the general public. NCTA and Gill Industries, as representatives of the cable television industry, oppose any form of signal carriage obligations for VBI services. They adhere to the Commission's rationale in its action on the issue in the teletext and TV aural subcarrier proceedings[25] and state that as ancillary activities, VBI telecommunications services do not merit must carry protection. NCTA also submits that this is not the proper proceeding to reconsider the Commission's teletext decision.

28. The Commission is not persuaded that it should reverse its determinations with respect to cable carriage of ancillary services in the teletext and TV aural subcarrier proceedings. Thus we will not require cable systems to carry broadcasters' VBI telecommunications services. However, in the teletext and TV aural subcarrier proceedings we have undertaken to further consider the question of whether to apply must carry protection to services that are directly related to regular programming.[26] Examples of such services include stereophonic sound and second language service on aural subcarriers and captions and superimposed text on teletext. The Commission has stated that due to the similar natures of the issues in both of these matters, it will resolve the must carry issue for teletext that is directly related to regular programming when it takes final action on must carry status for program related aural subcarriers. We believe that the same question is appropriate with respect to any new VBI services that might be program-related. In order to permit us to consider all of these must carry issues at the same time, we will also defer action on must carry status for program-related VBI services until our final decision in the TV aural subcarrier matter.

29. *Replacement of the Teletext Rules* — Services authorized under the teletext rules also qualify as permissible activities under the new authority for VBI telecommunications services. Inasmuch as the new authority is consistent with the policies established in the teletext

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[25] *See, Report and Order* in BC Docket No. 81-741, *supra*, para. 88 and *Second Report and Order* in Docket No. 21323, *supra*, para 26.

[26] *See, Memorandum Opinion and Order* in BC Docket No. 81-741, 50 FR 4678, 2/1/85, paras. 30 and 31 and *Second Report and Order* in Docket No. 21323, *supra*, paras. 26 and 27.

proceeding and preserves the teletext regulations that are specific to that type of service, the new rules will replace the teletext rules on a one-for-one basis as appropriate. The rules for the VBI communications authority are set forth in Appendix B.

Procedural Matters

30. Pursuant to the Regulatory Flexibility Act of 1980, the Commission's final regulatory flexibility analysis is:

I. Need for and purpose of the rules:

The Commission has concluded authorization of VBI telecommunications services will provide additional opportunities for extending and diversifying the services provided by television stations, will improve the efficiency of spectrum utilization, and may assist in satisfying the demonstrated need for additional paging services.

II. Summary of issues raised by public comments in response to the initial regulatory flexibility analysis, Commission assessment, and changes made as a result:

A. *Issues raised:* No issues or concerns were raised specifically in response to the initial regulatory flexibility analysis. The responses in general comments are all favorable to authorization of expanded use of the VBI and support full discretion for licensees in determining how these facilities are to be used.

B. *Assessment:* The Commission considers the absence of specific claims of adverse impact with respect to its proposals for expanded use of the VBI as indicative of their lack of potential for negative effects on small businesses. We believe that the open authority for use of the VBI provided by this action will provide new opportunities for participation by small businesses in the various markets for telecommunications services.

C. *Changes made as a result of such comments:* None.

III. Significant alternatives considered and rejected:

The Commission's alternatives were: 1) to not authorize expanded use of the VBI at all or 2) to authorize expanded use of the VBI but with restrictions on either technical systems or services. To refrain from providing the expanded authority would forego the public interest objectives sought in this rule making. With respect to the second alternative, a more restrictive authorization likely would limit the realization of the potential benefits of VBI telecommunications services and would represent an unnecessary intrusion by the government into the affairs of private businesses.

31. Authority for adoption of the rules set forth herein is provided under Section 2, 4(i), and 303 of the Communications Act of 1934, as amended.

32. Accordingly, IT IS ORDERED, that Parts 2, 73 and 76 of the Commission's Rules ARE AMENDED as set forth in Appendix B, effective March 4, 1985.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

APPENDIX A

Parties Filing Comments

1. Financial News Network, Inc.
2. Public Broadcasting Service
3. Gerald A. Rosander, Superintendent for Schools, San Diego County Office of Education
4. CBS, Inc.
5. Joint Comments of Operating Telephone Companies
6. American Broadcasting Companies, Inc.
7. Joint Comments of TV Station Licensees
8. Cosmos Broadcasting Corporation
9. Tribune Broadcasting Company
10. Satellite Network Delivery Corporation
11. Gill Industries
12. Cybernetic Data Systems, Inc.
13. National Broadcasting Company, Inc.
14. National Association of Broadcasters

Parties Filing Reply Comments

1. Public Broadcasting Service
2. Satellite Network Delivery Corporation
3. Joint Reply Comments of TV Station Licensees
4. National Cable Television Association
5. Cybernetic Data Systems, Inc.

APPENDIX B

Chapter I of Title 47 of the Code of Federal Regulations is amended and revised as set forth below.

1. Section 2.106 is amended by revising footnote NG142 to the Table of Allocations to read as follows:

Section 2.106 Table of Frequency Allocations.

* * * * *

NG142 TV broadcast stations authorized to operate in the bands 54-72, 76-88, 174-216 470-512, and 512-806 MHz may use a portion of the television vertical blanking interval for the transmission of telecommunications signals, on the condition that harmful interference will not be caused to the reception of primary services, and that such telecommunications services must accept any interference caused by primary services operating in these bands.

* * * * *

2. Section 73.646 is amended by revising it to read as follows:

Section 73.646 Telecommunications Service on the Vertical Blanking Interval.

(a) Telecommunications services permitted on the vertical blanking interval (VBI) service include the transmission of data, processed information, or any other communication in either a digital or analog mode.

(b) Telecommunications service on the VBI is of an ancillary nature and as such is an elective, subsidiary activity. No service guidelines, limitations, or performance standards are applied to it. The kinds of service that may be provided include, but are not limited to, teletext, paging, computer software and bulk data distribution, and aural messages. Such services may be provided on a broadcast, point-to-point, or point to multipoint basis.

(c) Telecommunications services that are common carrier in nature are subject to common carrier regulation. Licensees operating such services are required to apply to the Commission for the appropriate authorization and to comply with all policies and rules applicable to the particular service.

(d) Television licensees are authorized to lease their VBI telecommunications facilities to outside parties. In all arrangements entered into with outside parties affecting telecommunications service operation, the licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable. The licensee or permittee is also responsible for all aspects of technical operation involving VBI telecommunications services.

(e) The grant or renewal of a TV station license or permit will not be furthered or promoted by proposed or past VBI telecommunications service operation; the licensee must establish that its broadcast operation serves the public interest wholly apart from VBI telecommunications service activities. (Violation of rules applicable to VBI telecommunications services could, of course, reflect on a licensee's qualifications to hold its license or permit.)

(f) TV broadcast stations are authorized to transmit VBI telecommunications service signals during any time period, including portions of the day when normal programming is not broadcast. Such transmissions must be in accordance with the technical provisions of §73.682.

3. Section 73.621 is amended by revising paragraph (f) to read as follows:

Section 73.621 Noncommercial educational TV stations.

* * * * *

(f) Telecommunications Service on the Vertical Blanking Interval. The provisions governing VBI telecommunications service in §73.646 are applicable to noncommercial educational TV stations.

4. Section 73.682 is amended by adding new subparagraph (a)(24) to read as follows:

Section 73.682 Transmission standards.

(a) * * *

* * * * *

(24) Specific scanning lines in the vertical blanking interval may be used for the purpose of transmitting telecommunications signals in accordance with §73.646, subject to certain conditions:

(i) Telecommunications signals may be transmitted on Lines 10-18 and 20, all of Field 1 and Field 2. Use of specific lines is to be in accordance with Schedule I.

(ii) No observable degradation may be caused to any portion of the visual or aural signals.

(iii) Telecommunications signals must not produce emissions outside the authorized television channel bandwidth. Digital data pulses must be shaped to limit spectral energy to the nominal video baseband.

(iv) Transmission of emergency visual messages pursuant to §73.1250 must take precedence over, and shall be cause for interrupting, a service such as teletext that provides a visual depiction of information simultaneously transmitted on the aural channel.

(v) A reference pulse for a decoder associated adaptive equalizer filter designed to improve the decoding of telecommunications signals may be inserted on any portion of the vertical blanking interval authorized for data service, in accordance with the signal levels set forth on Schedule I.

(vi) All lines authorized for telecommunications transmissions may be used for other purposes upon prior approval by the Commission.

* * * * *

5. Section 73.3613(d) is amended by revising it to read as follows:

Section 73.3613 Filing of contracts.

* * * * *

(d) The following contracts, agreements, or understandings need not be filed but shall be kept at the station and made available for inspection upon request by the FCC: Contracts relating to the sale of broadcast time to "time brokers" for resale; subchannel leasing agreements for Subsidiary Communications Authorization operation; franchise/leasing agreements for operation of telecommunications services on the TV vertical blanking interval; time sales contracts with the same sponsor for 4 or more hours per day, except where the length of the events (such as athletic contests, musical programs, and special events) broadcast pursuant to the contract is not under control of the station; and contracts with chief operators and other engineering personnel.

6. Section 76.64 is amended by revising it to read as follows:

Section 76.64 Carriage of subscription television programs and telecommunications services on the vertical blanking interval.

The provisions of §§76.55, 76.57, 76.59, 76.61, and 76.63 do not require carriage of any subscription TV program or any telecommunications service transmitted on the vertical blanking interval.

Common Carrier
International Satellite Systems

Commission issued a *Report and Order* regarding the establishment of satellite systems which would provide international communications services and *Memoranda Opinions, Orders and Authorizations* of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issued *Memoranda Opinions and Orders* regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.

—*Cygnus Satellite Corp.*

FCC 85-403

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In the Matter of the Application of Cygnus Satellite Corporation	File No. CSS-84-002-P(LA)
For authority to construct, launch and operate a North Atlantic regional satellite system consisting of two in-orbit satellites and one ground-spare.	

MEMORANDUM OPINION AND ORDER

Adopted: July 25, 1985; Released: September 3, 1985

BY THE COMMISSION:

1. The Commission has under consideration the captioned application, filed by Cygnus Satellite Corporation (Cygnus) on March 7, 1984, seeking authority pursuant to Sections 303(g), 308 , 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 308-319 (1976) to construct, launch and operate a North Atlantic regional communications satellite system consisting of two in-orbit and one ground spare satellite. Cygnus filed on March 15, 1984, a request that the Commission advance publish its requested orbital positions with the International Frequency Registration Board (IFRB), with supplementary revisions and additions

filed by request of the Common Carrier Bureau on February 28, 1985 and March 18, 1985. Cygnus also submitted three amendments pursuant to Section 1.65 of the Commission's rules, 47 C.F.R. Section 1.65 (1984) to its application on June 18, 1984, November 13, 1984 and April 16, 1985.

2. The application was placed on public notice on March 14, 1984. A petition to deny was filed by the Communications Satellite Corporation (Comsat). Comments were filed by AT&T Communications, Inc. (AT&T), International Satellite, Inc. (ISI), and Orion Satellite Corporation (Orion); Cygnus filed a consolidated opposition to the petition to deny and reply comments. Other responsive pleadings were filed by Comsat, Orion, ISI, the United States Departments of State and Commerce, Philip Trezise and Rene Anselmo as Chairman of PanAmSat. Letters addressed to the Chairman of the Commission from various members of the United States Congress were also made part of the record as were letters from signatories to INTELSAT.[1]

I. The Application

3. Cygnus, a newly-formed Delaware corporation, proposes to establish a private international satellite system that would link the 48 contiguous United States (CONUS) and Western Europe.[2] In addition, the satellite will contain a spot beam which will provide service to Puerto Rico, the U.S. Virgin Islands, the Caribbean Basin and portions of Central America. Cygnus proposes to offer all of its transponder capacity on a non-common carrier basis through transponder sales or long-term leases on both a preemptible and non-preemptible basis. It intends to market its capacity both directly and through brokers. The satellites are designed to provide video, audio and data transmission services, including high-speed facsimile, video teleconferencing, and computer-to-computer communications, teletext, videotext, electronic mail and data collection and distribution services. The proposed system will permit the distribution of video programming to small roof-top receivers, thus permitting international direct-to-home service. Cygnus will also allow its customers to use the North Atlantic regional satellite system for private voice communications services. Cygnus states that the system is compatible with micro and mini earth stations, ranging in size from 0.8 to 2.0 meters and 2.0 and 4.5 meters, respectively. Cygnus states that its potential customers include video suppliers, television networks, major multi-national corporations and United States government agencies.

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[1] *See* Appendix A for a list of signatories who have submitted correspondence to the Commission.

[2] Cygnus States that the North Atlantic regional satellite system represents the first stage of Cygnus' proposed multi-region international satellite network and that it intends to file subsequently an additional application to provide international regional satellite service in the Pacific Basin. Cygnus application at 4-5.

4. The proposed system will consist of two 16-transponder, 11-12/14 GHz satellites, located at 45 degrees and 43 degrees West Longitude. Each satellite will have transponders with a 50-watt power output and 54 MHz of usable bandwidth. Each satellite will be equipped with one transmit and one receive beam for coverage to each of its Eastern and Western service areas. In addition, the antenna feed will be structured so as to permit, through ground command, additional transmit and receive beams to illuminate Puerto Rico, the U.S. Virgin Islands, the Caribbean Basin and portions of Central America. Uplink frequencies for both beams are proposed at 14.0-14.50 GHz, and downlink frequencies are proposed at 11.7-12.2 GHz (or, alternatively at 10.95-11.2 GHz and 11.45-11.70 GHz) for the West beams and 10.95-11.2 GHz and 12.50-12.75 for the East beam. Frequency reuse is employed in the uplink through linear (vertical and horizontal) polarization. Each transponder will be capable of being addressed in the earth-to-space direction from either the East or West coverage areas through the provision of ground command switching. The spacecraft will be designed for a ten-year mission life and will be compatible with both the Ariane 4 and NASA's Space Transportation System (STS) launch vehicles, although Cygnus intends to use the latter. Cygnus plans to construct, own and operate two telemetry, tracking and command (TT&C) earth station facilities at different locations, each to be equipped to perform all TT&C functions for both in-orbit spacecraft. Each TT&C earth station will have two antenna systems, one for each in-orbit satellite, and will, in the normal mode of operation, be designed as the primary station for one spacecraft and the back-up station for the second in-orbit spacecraft. Operation of the TT&C system will permit the ground control center, scheduled to be collocated with Cygnus' future headquarters, to monitor the status of the spacecraft and send commands as required.

5. Cygnus estimates the total projected capital costs of its proposed system to be $226 million (in 1985 dollars), the costs divided among three satellites estimated at $48 million each, two STS launches at $29 million each, launch insurance for both launches estimated at $13 million, and two TT&C earth stations and a satellite operational control center, both estimated at approximately $11 million. Should Cygnus use the Ariane launch vehicle, the cost of the two launches may increase by 15-20 percent over the cost of the two STS launches. In addition to these capital expenditures, Cygnus expects to spend approximately $9.5 million over a four-year preoperational period, commencing upon approval of Cygnus' application. Preoperational functions would include system design, engineering, contract monitoring and launch arrangements estimated at approximately $1.4 million over the four-year period, marketing, general and administrative expenses estimated at $1.3 million, and operation and

maintenance expenses estimated at $1 million. Cygnus states that it will obtain the funds necessary for the start-up operation from the corporation's shareholders and for long-term operation through a combination of equity capital, long-term debt, lease financing, convertible debt and transponder sales.[3]

6. Cygnus states that its proposal is in the public interest because, in addition to the innovative video, voice and data transmission services that will be available to customers, the unique technical capacities and structure of its proposed system promotes efficiency and flexibility by permitting customers, particularly large volume corporate users, to own and operate their own international transponder and earth station facilities. The relatively inexpensive transportable micro and mini earth stations compatible with the Cygnus system will benefit these small and medium-sized international communications users who can coordinate occasional satellite use. Cygnus claims that the proposed system will also: (1) increase competition in video, data and private line voice services between the United States and Western Europe in furtherance of the Commission's pro-competitive philosophy; (2) reduce substantially end-to-end rates for international telecommunications users by making available "single-hop" telecommunications service, thereby eliminating expensive terrestrial transmission networks, also by making it feasible for customers to use the relatively low cost earth stations to access the proposed system, by permitting customers to use the same terminal equipment for both international and domestic communications purposes, and by designing a system that is compatible with cost-efficient advanced communications technologies; (3) permit access to critical international orbital locations; (4) further the national objective of continuing United States leadership in satellite development; (5) develop new markets for American services and products both in the United States and abroad; (6) develop new and advanced telecommunications services and expand the base of customers desiring international satellite communications capability; (7) strengthen the nation's defense communications capabilities by increasing "survivability" and "restorability" of such communications; and (8) provide satellite transmission service on a non-profit basis to Caribbean Basin countries to assist them in developing satellite communications networks.

7. Cygnus contends that its proposal is fully consistent with the Communications Satellite Act of 1962, as amended, 47 U.S.C. Sections 701-744 (1976), and that the statute contemplates the likely existence of additional United States-based international satellite carriers. Section

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[3] Cygnus includes with its application letters indicating interest in assisting Cygnus in funding its project from the United States Trust Company, Perpetual American Bank, and Donaldson, Lufkin & Jenrette.

102(d) of the Act provides that it is not the intent of the statute to preclude the establishment of an additional communications satellite system when one is required by the national interest. Further, Section 201(a)(6) provides that the President shall allow the use of a separate satellite system when required by the national interest. Moreover, Cygnus states that the Commission decided in its *Transborder Satellite Video Services* order that the Satellite Act and its legislative history do not preclude the use of non-INTELSAT facilities for international telecommunications services.[4]

8. Cygnus states that its proposal is fully consistent with the INTELSAT Agreement in that the Agreement recognizes the use of non-INTELSAT facilities and has procedures in Article XIV of the Agreement to coordinate these separate facilities with its own system. Cygnus claims that it is not proposing the offer "public" telecommunications services as defined by Article I(k) of the Agreement since it will not indiscriminately hold out its services to the public. Cygnus thus argues that its proposal is not subject to the "significant economic harm" coordination provisions of Article XIV(d) which applies exclusively to "public telecommunications services." It states that, at most, its application should be subject to the technical coordination requirements of Article XIV(e) of the Agreement which governs the use of non-INTELSAT systems for "specialized" communications services. Nevertheless, Cygnus avers that INTELSAT will not suffer economic harm from implementation of the Cygnus system because the thrust of INTELSAT's activities and profit is already committed and must necessarily be focused on the larger, more profitable switched voice transmission market. Cygnus claims that it will attract a segment of the potential specialized service market that has not and would not likely use INTELSAT because of the prohibitively high costs inherent in providing data and video services through the global system.

II. The Pleadings

9. Comsat, in its petition to deny, argues that grant of Cygnus' application would be inconsistent with the United States' commitment to the INTELSAT system as embodied in the Communications Satellite Act of 1962 and reaffirmed in the Commission's *Transborder* order, *supra.* Comsat first avers that Section 102(d) of the Act clearly places the burden on establishing an overriding national interest requirement on the proponents of separate systems and clearly contemplates a more stringent showing than the ordinary public interest standard, which Comsat claims Cygnus has not met in any case. Comsat also argues that Cygnus provides no concrete support for its statements to the effect that its system would provide more innovative services than are now offered by

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[4] Transborder Satellite Video Services, 88 FCC 2d 258 (1981) (hereinafter referred to as "*Transborder*").

Comsat and that all of its services can be delivered at lower rates than those currently in effect. In any case, adds Comsat, this is hardly grounds for Cygnus' indictment that Comsat does not serve the needs of the American people and hence, is hardly sufficient to satisfy the Section 102(d) national interest requirement. With regard to the classification of Cygnus as either a common carrier or non-common carrier for Article XIV purposes, Comsat contends that such a distinction is not relevant to or dispositive of the question whether the proposed services constitute "public telecommunications services" within the meaning of the INTELSAT Agreement. Comsat states that both the language of the Agreement and INTELSAT's interpretations of that language clearly encompass the type of service proposed by Cygnus, thus requiring Cygnus to engage in Article XIV(d) consultation with INTELSAT.[5]

10. With regard to the issue of significant economic harm, Comsat argues that the satellite systems previously approved by INTELSAT, other than the Algerian use of Intersputnik, provide services that otherwise would have been provided on existing or planned terrestrial networks and not by INTELSAT; Intersputnik coordination was made subject to numerous restrictions. Comsat claims that Cygnus' system, which has sufficient capacity to accommodate substantially more than the approximately 7,100 circuits between the United States and Europe currently carried on the INTELSAT system, clearly has not been designed without any expectation of attracting a significant amount of existing INTELSAT traffic. Comsat further states that Cygnus' argument that the Commission may leave it to INTELSAT to determine whether its application meets the Article XIV(d) requirements should be rejected as the Commission itself must satisfy such requirements prior to any grant of conditional authorization. Finally, Comsat argues that a departure from the established national policy is not warranted since such change would: (1) encourage other countries to establish their own long-haul, high density intercontinental satellite system; (2) diminish the United States leadership role in INTELSAT and reduce United States credibility as a strong proponent of INTELSAT; (3) be perceived as promoting inefficient use of orbital slots and frequency spectrum and as repudiating prior United States efforts to promote conservation of these resources internationally; and (4) compromise United States efforts to discourage adoption of planned assignments of orbital slots and frequency spectrum at the 1985 and 1988 Space WARCs.

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[5] Comsat refers to its reply to Orion's opposition in File No. CSS-83-004-P(LA) wherein Comsat argued that given the definitions of "public" and "specialized" telecommunications services in Articles I(k) and (i), respectively, of the Agreement, the fixed-satellite services proposed are public services because the foreign end of the network would be operated through public PTT facilities. Comsat petition to deny at 8 (filed April 13, 1984).

11. AT&T states that while Cygnus' claim that no economic coordination is required rests on domestic legal concepts of common carriage, the question of whether Cygnus' proposed venture is "public telecommunications services" under Article XIV(d) for the INTELSAT Agreement remains unresolved. AT&T further states that INTELSAT does provide international satellite facilities for services that are similar to those proposed by Cygnus, such as INTELSAT Business Services (IBS) for the transmission of voice, data and teleconferencing. Like Cygnus' proposed service, IBS uses small customer premise earth stations and is targeted to business users. Further, the need for expensive terrestrial links to more remote, large U.S. Earth Station Ownership Committee (ESOC) stations will be eliminated by major users and by the location of new, smaller IBS earth stations accessing INTELSAT near large metropolitan areas. In addition, AT&T argues that Cygnus does not address the problems raised by the bypass of terrestrial links by its proposed system on both sides of the Atlantic. Finally, AT&T requests that in the case Cygnus' application is granted, the Commission clearly state that should Cygnus' projected market not develop as Cygnus expects, the Commission will not entertain any request by Cygnus to compel common carriers to use any spare capacity in its system.

12. ISI contends that Cygnus' application raises questions as to whether it is inconsistent with the North Atlantic regional satellite proposal of Orion within the meaning of Section 1.747 of the rules, and whether M/A-Com, Inc. (M/A-Com), a major satellite communications equipment designer, manufacturer and supplier is the real party in interest behind Cygnus' application as well as Orion's. ISI notes as a preliminary matter that two Orion shareholders, together holding 8.4 percent of Orion's stock, are also identified by Orion as "executives" of M/A-Com. ISI states that both shareholders play major roles in the management of the company and its various subsidiaries. ISI claims that in view of the subordinate positions of Cygnus' principals within M/A-Com's corporate structure, the real party in interest behind Cygnus' application may be M/A-Com. ISI states that this strong nexus between M/A-Com, presumptively interested as a major supplier of satellite systems, and the non-INTELSAT North Atlantic satellite systems, and the individuals who control more than 40-percent of Cygnus stock, as well as its Board of Directors, suggest that M/A-Com may be in a position to control the affairs of a satellite carrier which purports to be an independent entity. Approval of Cygnus' proposal, which was submitted a year after Orion's, simultaneously with those of Orion and ISI, would contravene Commission policy providing that innovative service proposals must be given some reasonable opportunity to succeed in the market

before reactive filings of other carriers are allowed to take effect.[6]

13. Orion objects to Cygnus' request that its application be processed concurrently with the Orion application which was filed a year before that of Cygnus. Orion, in its reply to ISI's claim that the Orion and Cygnus applications are inconsistent and in conflict with each other, asserts that ISI has failed to prove such inconsistency and conflict. Further, Orion avers that the two "executives" of M/A-Com who hold ownership interests in Orion together only hold 8.4 percent of the company's stock. This, argues Orion, cannot be deemed a controlling interest.[7]

14. In addition to these pleadings, the Commission has received many letters from signatories to INTELSAT expressing concern that possible changes in United States policy regarding competing international satellite systems would not be consistent with the United States' legal commitments to INTELSAT. Generally, these letters claim that the competing systems propose to concentrate their services in the high traffic routes in the North Atlantic Basin and, in effect, receive high earnings while meeting the requirements of a small number of large users. For INTELSAT, it is argued, this would result in the loss of large traffic trunks and would significantly reduce the revenues available to meet its capital investment requirements and hold down rates throughout the world. Such a change in U.S. policy would negatively impact all users of INTELSAT, in particular, the people in small and developing countries. Also expressed is the concern that United States' approval of any of the pending applications would lead to a proliferation of other U.S. satellite systems intending to carry public international telecommunicaitons traffic in direct competition with INTELSAT which, in turn, would encourage other INTELSAT members to make similar authorizations for separate systems.

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[6] ISI moves to strike the comments of both Philip Trezise and the firm Wiley & Rein as they fail to comply with the procedural requirements of Section 309(d)(1) of the Communications Act of 1934 regarding the submission of documents to the Commission by parties in interest. ISI states that both sets of comments were at least indirectly funded by INTELSAT, and that they fail to meet the minimal requirements of setting forth specific factual allegations with respect to any of the proposals for private satellite systems.

Philip Trezise, in a August 3, 1984 letter to the Commission, denies all claims of both ISI and Orion. Trezise first states that his submission was neither labeled nor intended as an "objection" or a "petition to deny" the ISI or Orion or any other application, and that it was not developed expressly for submission to the Commission, but rather to facilitate general discussion. Trezise then states that views expressed therein are his own and not necessarily those of INTELSAT. Finally, Trezise argues that his comments were timely submitted in response to the public notices regarding the application of PanAmSat and Systematics General Corp., on June 13, 1984 and June 27, 1984, respectively.

[7] Orion, like ISI, moves to strike the comments of both Philip Trezise and the firm Wiley & Rein for the same reasons argued by ISI *supra*.

15. In its opposition to Comsat's petition to deny, Cygnus observes as a preliminary matter that Comsat fails to satisfy the prescribed statutory criteria of Section 309(d)(1) of the Communications Act, which requires that a petition to deny contain factual allegations sufficient to show that grant of the application would be *prima facie* inconsistent with the public interest. Cygnus maintains that Comsat has failed to produce any facts or precedent that would indicate Cygnus' application does not comply with the Satellite Act or that the many public interest benefits cited in Cygnus' application would not result from the Cygnus proposal. Cygnus reiterates that its proposal should be characterized as a "private", not "public" offering in that it is a non-common carrier system and, thus, should not be subject to Article XIV(d) of the INTELSAT Agreement.[8] Further, Cygnus states that the Commission, in its *Transborder* decision, recognized that economic coordination issues are most appropriately addressed by INTELSAT, not by the Commission in exercising its regulatory authority pursuant to the 1934 Communications Act. Finally, Cygnus avers that its application is consistent with U.S. foreign policy objectives and that the Executive branch, not Comsat, is the better judge of the effect of regional international satellite service on U.S. policy objectives.[9]

16. In response to AT&T's comments, Cygnus states that its proposal satisfies both the *Transborder* standard and the statutory standard of Section 102(d) of the Satellite Act. It contends that its proposal is significantly different from the system characteristics and mix of services available under IBS. For instance, IBS is limited primarily to voice, data and video teleconferencing services while Cygnus' proposed services will consist, in part, of various radio services, including international direct broadcast satellite service and High Definition Television. Cygnus also claims that it can offer the end user greater service flexibility, newer service offerings and greater cost savings than IBS due to the proposed systems's compatibility with micro and mini earth stations, the lower cost of these smaller earth stations and avoidance of expensive, inefficient

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[8] In this regard, Cygnus refers to the Orion opposition to Comsat's petition to deny in FCC File No. CSS-83-002-P, filed April 28, 1983, wherein Orion argued that the nature and ownership of the earth station facilities accessing the satellites are irrelevant to the authorization of construction, launch and operation of the space segment.

[9] Comsat filed a reply to Cygnus' opposition on May 8, 1984 wherein it argued that Cygnus has not refuted its claim that Cygnus has not met the *Transborder* test or the more rigorous test of the Satellite Act. Comsat also states that Cygnus' economic harm analysis is greatly flawed in that with the unlikely exception of direct broadcast satellite service, Cygnus' proposed services are very similar to services that INTELSAT either now offers or will offer by the time the Cygnus system is operative. Finally, Comsat contends that Cygnus' promise not to make its transmission capacity available for public switched voice transmission service is illusory since once Cygnus makes space segment available to its customers for private use, Cygnus will be powerless to control how its customers use that capacity.

terrestrial links. Cygnus states that it will not require AT&T or any other carrier to provide it traffic on an involuntary basis.

17. As to the issue of the ownership and control of Cygnus, Cygnus argues that neither M/A-Com nor any other party is an undisclosed real party in interest behind the Cygnus application. Cygnus points out that ISI does not even allege that M/A-Com has any ownership interest in Cygnus, the primary test for determining whether a third person is a real party in interest. In addition, Cygnus states, ISI has not even demonstrated, only inferred, control by M/A-Com in Cygnus. Cygnus claims that in the absence of any financial or other involvement by M/A-Com over Cygnus' affairs, ISI erroneously and mistakenly indentifies M/A-Com as the real party in interest.[10]

III. Discussion

18. Cygnus' application is one of six applications that have been filed to construct and operate international satellite systems separate from INTELSAT. At the request of the Departments of State and Commerce, the Commission has refrained from taking final action on any of the applications until such time as the Executive branch could analyze the applications' impact on the national interest and foreign policy of the United States.[11] On November 28, 1984, President Reagan signed a Presidential determination that separate satellite systems are "required in the national interest" within the meaning of Sections 102(d) and 201(a) of the Communications Satellite Act of 1962, subject to certain limitations.[12] The Departments of State and Commerce concurrently, at the direction of the President, jointly informed the Commission by letter of the Presidential Determination and the criteria necessary to ensure that

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[10] ISI filed a reply to Cygnus' consolidated opposition to petition to deny and ISI's reply comments (filed May 3, 1984). ISI first claims that it did not allege common control of Orion and Cygnus, but merely sought to draw the Commission's attention to "certain unusual facts that warrant further Commission investigation." Also, ISI states that Cygnus fails to address ISI's question of to what degree there is an overlapping interest or control between Cygnus and M/A-Com. ISI further argues that the Commission should conclude that Orion and Cygnus are properly aggregated as a single interest, and if the Commission's general orbit spectrum policy is applicable to the applications of Orion and Cygnus, only two slots would be available to them in the absence of a showing of specific customer demand for more than two.

[11] Letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, and Diana Lady Dougan, Coordinator, International Communications and Information Policy, to Chairman Fowler, in FCC File No. CSS-83-002-P, dated April 6, 1983; Letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, to Chairman Fowler, in FCC File No. CSS-83-004-P(LA) (August 26, 1983).

[12] Presidential Determination 85-2, filed in CC Docket No. 84-1299 (November 28, 1984).

the United States meets its international obligations.[13] The limitations set forth by the Executive branch require, first, that each system be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public switched message networks (except for emergency restoration services), and, second, that one or more foreign authorities authorize the use of the proposed system and enter into consultation procedures with the United States under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm.

19. The Presidential determination satisfies the requirement for a threshold finding under the Communications Satellite Act that the proposed separate systems are "required in the national interest." The Presidential determination, however, is a general policy decision and is not intended to decide which, if any, applications now before the Commission should be granted. Therefore, the Commission's task to establish a policy for regulatory consideration of the applications and to determine whether any of the proposed systems should be licensed under the public interest standard of the Communications Act of 1934 consistent with the Presidential determination.

20. We initiated an inquiry and rulemaking in CC Docket No. 84-1299 to solicit data and analyses regarding issues that have arisen in conection with the applications.[14] In that proceeding, we considered the potential public benefits of authorizing the proposed systems, the economic impact of the systems on INTELSAT and their effect on consumer service providers and equipment manufacturers. In addition, we considered legal, technical and other policy issues that must be taken into account in considering the applications. Further, from a regulatory perspective, we considered unresolved questions concerning the scope and applicability of the Executive branch's service limitations.

21. In our *Separate Systems* decision in CC Docket No. 84-1299, we have today concluded that the establishment of separate satellite systems will result in substantial benefits to users of international satellite communications services.[15] Separate satellite systems will provide currently unavailable service enhancements to users with special communications needs, stimulate technological innovation and services development create improved network efficiencies and reduce user-costs, and contrib-

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[13] Letter from George P. Shultz, Secretary of State, and Malcolm Baldridge, Secretary of Commerce, to Chairman Fowler in CC Docket No. 84-1299 (November 28, 1984).

[14] Establishment of Separate Systems Providing International Communications, Notice of Inquiry and Proposed Rulemaking, 50 Fed. Reg. 1570 (released January 4, 1985) (hereinafter referred to as the "*Separate Systems*" notice).

[15] Separate Satellite Systems, Report and Order, FCC 85-399, released 9-3-1985.

ute to the creation of new business and trade opportunities. We have further concluded that authorization of separate satellites subject to the Executive branch limitations provides reasonable assurance that INTELSAT will avoid significant economic harm from the entry of new suppliers. In reaching these conclusions, we addressed and resolved issues which were raised in response to Cygnus' and other applications and thus find it unnecessary to address these same issues in this order. Here, we will determine whether Cygnus' application is consistent with the Executive branch service limitations, whether the applicant has the requisite legal, financial and technical qualifications and whether grant of the application otherwise satisfies the public interest standard of the Communications Act, and we will address any outstanding issues particular to this application. We believe that our decision here, along with our decision in CC Docket No. 84-1299, adopted today, is fully dispositive of all issues and arguments raised with respect to Cygnus' application.

Consistency With Executive Branch Service Restrictions

22. As we have discussed in our *Separate Systems* decision, *supra*, the purpose of the Executive branch restrictions is to avoid significant economic harm to INTELSAT. Through these service limitations, INTELSAT's "core" revenues obtained from supplying space segment capacity for international switched message services would be protected from diversion by new suppliers. According to the Executive branch restrictions, separate systems are to be ". . . restricted to providing services through the sale or long-term lease of transponder or space segment capacity for communications not interconnected with the public switched message networks." However, we found it necessary in our *Separate Systems* decision to clarify and further develop the restrictions to assure that they are understood by all parties and can be implemented from a regulatory standpoint.

23. We have determined that no communications provided over separate satellite system space segment capacity may interconnect with the public switched facilities of common carriers to provide switched-message services such as MTS, telex, TWX, telegraph, teletext facsimile and high speed switched data services. In addition, we decided to apply the "no interconnection" and "sale and long-term lease" restrictions not only to separate system operators, but also to all levels of users of the facilities. Further, in view of the "sale and long-term lease" requirement, separate system licensees may not operate as common carriers. Finally, we have determined the following: (1) there is no need to establish a minimum unit of space segment capacity which a separate systems must provide; (2) the minimum lease period for the "long-term lease" of capacity is to be one year; (3) space segment capacity may be obtained and

resold by common carriers and enhanced service providers to provide communications services not interconnected with any public switched message network; and (4) there is no basis to establish a "sunset" date for the Executive branch service restrictions absent a finding from the Executive branch that they are no longer necessary to fulfill U.S. international obligations.

24. Cygnus' application is consistent with the Executive branch restrictions. Cygnus proposes to provide space segment capacity on a non-tariffed basis through transponder sales or long-term leases. Cygnus does not propose to permit interconnection of its facilities with public switched facilities. Common carriers and enhanced service providers may obtain Cygnus' space segment capacity to provide services not interconnected with any public switched network. All restrictions concerning interconnection and "sale and long-term lease" practices apply not only to Cygnus but to all levels of users of its facilities.

Legal Qualifications

25. Cygnus has submitted the Common Carrier and Satellite Radio Licensee Qualification Report (FCC Form 401). Cygnus was incorporated in Delaware in March, 1984. Cygnus common stock is owned by Jack Shaw (14-percent), President and Chief Executive Officer of M/A-Com/PCC, Inc. (M/A-Com); James Peeler (14-percent), Senior Vice President and Secretary of M/A-Com; Andrew Werth (14-percent), Senior Vice President of M/A-Com; Paul Singh (19.5-percent), a former Vice President of M/A-Com who is now a management consultant; Albertus Collins (13.5 percent), Debbie Meyers and Elizabeth Ott, all independent agribusiness executives (12.5 percent each). Cygnus does not currently have applications pending before the Commission.

26. ISI, in its comments, suggests that the existence of M/A-Com executives as part owners and/or directors of both Orion and Cygnus may preclude us from licensing both systems under Section 1.747 of the Commission's rules. ISI was specifically referring to the following facts: certain M/A-Com executives currently control over 40 percent of Cygnus' stock as well as comprise 50 percent of Cygnus' Board of Directors, and other M/A-Com executives control over 8 percent of Orion's stock. We find that Section 1.747 is technically inapplicable to the question of M/A-Com's control over Orion and Cygnus in that Section 1.747 involves only common carrier applications. Even if these applications were subject to Section 1.747, it is clear that the individuals employed by M/A-Com who hold 8 percent of Orion's stock are not the same individuals involved with Cygnus, and that M/A-Com itself does not have control over Orion. On the basis of FCC Form 430 and attendant documents submitted to the Commission by Cygnus, we find that Cygnus possesses the legal

qualifications to be licensed to own and operate an international satellite system.[16]

Financial Qualifications

27. In assessing an applicant's ability to construct, launch and operate an international satellite system, we must consider the applicant's financial competence or qualifications. We determined in our *Separate Systems* decision that an applicant must demonstrate its financial preparedness to assume the costs and liabilities involved in constructing, launching and operating the proposed system for one year. The applicant must show its current financial ability to meet the costs and expenses of planning, constructing, launching and operating its proposed system.[17] However, in view of the fact that the applicant must undergo the INTELSAT consultation process, and due to the resulting uncertain status of the application pending this process, the applicant is unlikely to receive firm financial commitments. Therefore, we determined in our *Separate Systems* decision to consider the financial qualifications of applicants in two stages.

28. In the first stage, Cygnus must demonstrate (1) the estimated costs of proposed construction and launch, and any other initial expenses for the proposed space station(s); (2) the estimated operating expenses for one year after launch of the proposed space station(s); and (3) the source(s) or potential sources(s) of funding of the proposed system for one year, which would include the identity of financers and their letters of financial interest. For applicants which meet these minimal criteria, we will issue a construction permit setting forth the approved technical parameters of the proposed system for purposes of INTELSAT technical coordination under Article XIV(d). No later than sixty days after the Commission has been informed by the Department of State that the United States has fulfilled its Article XIV(d) obligations and that the Commission may begin final authorization of Cygnus' proposed system, Cygnus must additionally meet the following second stage criterion to be

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[16] ISI also questioned whether based on the control exercised by M/A-Com executives over Cygnus we should conclude that the former company is the "real party in interest" behind the latter's application. Cygnus has disclosed all participants in its venture; to that extent, there is no undisclosed real party in interest. The relevant inquiry is whether the license ought to be issued in the name of M/A-Com rather than Cygnus. Cygnus is a separate corporate entity, and, even if M/A-Com controlled Cygnus, the license could still be issued in Cygnus' name.

[17] The financial qualifications required for obtaining a license are in addition to the various requisites of the application process, specifically the limitations prescribed by the Presidential determination, the INTELSAT Article XIV(d) consultation process, and a finding by the Department of State that the United States has fulfilled its obligations and has satisfied the Title III public interest requirements pursuant to the Communications Act of 1934.

given permission to begin construction: Cygnus' current financial ability to meet the costs of construction and launch, and operating expenses for one year after launch.[18]

29. Cygnus demonstrates that it possesses the requisite financial qualifications to obtain a conditional construction permit. First, it has estimated that total capital costs for its system will be approximately $226 million, broken down as follows: cost of three spacecraft, including incentive payments, at approximately $144 million; two STS launches at approximately $58 million, insurance premiums for space segment failures at approximately $13 million; and ground segment costs, including two TT&C earth stations plus one satellite operations control center at approximately $11 million. Cygnus also expects to spend approximately $9.5 million over a four year pre-operational period on design, engineering, marketing, operation and maintenance, administration and other expenses. Second, Cygnus states that it expects to fund its system through a combination of various financial instruments such as equity capital, long-term debt, lease financing, convertible debt and transponder sales. Cygnus included three letters from financial institutions expressing interest in helping to fund Cygnus' system. As provided in the procedures established in our *Separate Systems* decision, Cygnus must meet these requirements no later than sixty days following the receipt by the Commission of the State Department's letter stating that the United States has fulfilled its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system. At that time, we will issue an order that permits Cygnus to begin construction, providing Cygnus has met all other requirements set forth in this order. Once either the conditional construction permit or Commission order permitting construction by the applicant is issued, Cygnus bears all risks and liabilities in commencing construction of its satellite system pending final Commission issuance of launch authority and a license to begin operation.

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[18] A demonstration of current financial ability to meet such costs and expenses would include the submission of a balance sheet, verified by affidavit, current for the latest fiscal year and documentation of any financial commitments reflected in the balance sheet together with an exhibit demonstrating that the applicant has current assets and operating income sufficient to meet its estimated construction launch and operation costs and expenses. For newly established entities unable to submit a current balance sheet, these applicants shall submit an exhibit indicating the estimated income or revenues anticipated from the proposed operation of the satellite system necessary to meet the estimated costs of construction, launch and operation along with any additional information requested by the Commission. Such additional information could include scheduled debt financing or stock issues, established lines of credit or other forms of internal financing. If the applicant is owned by more than one corporate parent, it must submit evidence of a commitment to the proposed satellite program by management of the corporate parent upon whom it is relying for financial resources.

Technical Qualifications

30. Two aspects of the technical proposal in Cygnus' application cause us concern: (1) Cygnus' failure to adequately address the impact of the power flux-density limits of the International Radio Regulations on its use of certain carrier types in its European beam; and (2) its failure to design its system for full frequency reuse in the downlink frequency bands by use of cross-polarization and in each uplink beam by use of satellite antenna discrimination.

31. With respect to compliance with the power flux-density (PFD) limits of the International Radio Regulations, Cygnus includes a table on page 121 of its application which purportedly shows that the PFD limits will be met by its proposed system. The table indicates that the maximum PFD will be –156.0 dB(W/m^2/4kHz) for a single 90-megabit-per-second digital carrier and –138.7 dB(W/m^2/4kHz) for a single TV carrier. In footnotes to the table, Cygnus indicates that the PFD of its digital carrier meets the PFD limits for all of its European-downlink frequencies and that the PFD of its TV carrier meets the PFD limits for the 12.50 - 12.75 GHz band "for angles 25° and more." In order for its TV carrier to meet the PFD limits in the 10.7 - 11.7 GHz band, Cygnus states that "additional spreading of up to 12.0 dB will be necessary for angles below 25°, [and for] angles 25° and more, 1.3 dB additional spreading is needed."

32. The analyses of Cygnus give rise to several concerns. First, in computing its PFD figures, Cygnus used a satellite EIRP (equivalent isotropically radiated power) of 48 dBW — derived from its spacecraft EIRP budget on page 106 of its application — which, in turn, was derived using a TWT amplifier power of 17 dBW and an antenna gain of 33.1 dBi. However, on page 98 of its application, Cygnus states that the maximum antenna gains "are likely to be at least 4 dB higher" than the 33.1 dBi figure. With the additional 4 dB of antenna gain taken into account, there would only be a 2 dB margin between the calculated PFD for the digital carriers and the relevant limit of –150 dB(W/m^2/4kHz) specified in the Radio Regulations. For the case of the digital carriers, it is not clear that this 2 dB margin would be sufficient since Cygnus apparently used the underlying assumption in its calculations that the TWT amplifier power would be distributed perfectly evenly across an entire 54 MHz transponder.

33. With respect to the TV carriers the situation would be substantially worse. The centers of the Cygnus satellites' European beams point at the earth's horizon. Accordingly, the angle of arrival relevant to the PFD limits is 0°. With the additional 4 dB of antenna gain, the PFD of the TV carriers would be –134.7 dB(W/m^2/4kHz) and would exceed the relevant PFD limits of –150 dB(W/m^2/4kHz) in the 10.95 - 11.20 GHz band and –148 dB(W/m^2/4kHz) in the 12.50 - 12.75 GHz band. Since the 54 MHz

bandwidths of the transponders would not permit sufficient additional signal spreading to bring the PFD of the TV carriers into compliance with the limits, the only recourse would be to lower the transponder power. Our analysis of the application and information supplied by Cygnus for international coordination indicates that, at least for the TV carriers, the transponder power for the European beam would be limited to as little as 2 watts of the 50 watts proposed by Cygnus. This situation calls into question Cygnus' ability to provide certain services it has proposed and its marketing plans as stated in its application. There is also a question as to whether Cygnus has made an appropriate choice of facilities (satellites with 50-watt transponders) to provide its proposed services.

34. With respect to full frequency reuse, the Commission has a longstanding policy of requiring the greatest efficiency practicable in the satellite systems it authorizes. Cygnus has proposed to provide for full frequency reuse by means of cross-polarization in only the uplink of its networks. For the downlink of its networks, Cygnus has requested assignment of 500 MHz of spectrum in each of its beams where only 250 MHz would be necessary under Cygnus' proposal when cross-polarization is employed. Cygnus offers no explanation in its application as to why it has chosen to propose a system which is contrary to established Commission policy in this respect.

35. We are also concerned that Cygnus has proposed a system that does not provide for reuse of frequencies and polarizations in each uplink beam by means of space station antenna discrimination. Cygnus has proposed to configure its satellites in such a way that half of the uplink capacity (*e.g.*, half of the assigned spectrum in each beam or all of the assigned spectrum in one beam) would go unused at any given time. Therefore, the "throughput" of the satellites would be only half of what could be achieved by doubling the number of amplifiers and using the full capacity of both beams at once. As we have found in our *Separate Satellite* decision, frequency and polarization reuse in each beam generally should be employed to provide four-times reuse in cases where two beams, using the same band, serve areas sufficiently divergent to allow for the necessary antenna discrimination. We recognize that such a requirement will have a profound effect on satellite design considerations. This may, in particular, be true in the case of Cygnus since doubling the number of transponders on its proposed satellites might have been difficult due to the power requirements of its proposed 50-watt amplifiers. However, considering that it appears from our analyses above that 50-watt amplifiers will not be necessary for the Cygnus satellites, we expect that concerns about the power limitations of the satellites would not be as serious.

36. For these reasons, we are not issuing a conditional construction permit at this time although Cygnus satisfies the legal and minimal financial requirements and its proposal is consistent with Executive branch policy. We are giving Cygnus an opportunity to clarify or modify its application to respond to our concerns. Cygnus may either explain why our analyses and policies should not be applied in its case, or else may modify its application to meet our concerns.

Other Issues

37. With regard to AT&T's request that the Commission clearly state that it shall disregard any requests of Cygnus to compel common carriers to use spare capacity in its system should its application be granted, we find such a request unwarranted by the present circumstances. We agree that Cygnus should not be guaranteed any market share or services. We conditionally authorize Cygnus' proposed system without any guarantee of traffic from U.S. international common carriers or other sources. It shall be this Commission's policy that any such private systems succeed or fail on their own merits and not through Commission action that would guarantee common carrier use of the systems.[19] At the same time, we determined in our *Separate Systems* decision not to prohibit common carrier use of the system and will consider any proposed common carrier purchase of capacity in the context of our normal facility planning and authorization procedures. We took this approach in authorizing private international submarine cable systems.[20]

38. As to Orion's and ISI's motions to strike comments filed by Philip Trezise and the firm Wiley & Rein, we find that such remarks cannot be barred based on a mere suspicion that entities other than those submitting the remarks were or are undisclosed parties in interest under Section 309(d)(1) of the Communications Act. While ISI and Orion have raised concern as to the nature and extent of INTELSAT's relationship with Trezise and Wiley, Johnson, we hesitate to rely upon the newspaper articles cited by ISI as sufficient demonstration of INTELSAT's undisclosed interest in this proceeding. As to Orion's and ISI's request that the Commission reject these comments as informal objections, we find that while the comments at issue do not set forth specific allegations regarding any of the pending separate satellite system applications, they do generally address matters raised by these applications. We conclude, therefore, that the Commission's desire to compile a complete and comprehensive record regarding issues as novel as those presented here will best be served by accepting for filing the remarks of Trezie and Wiley

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[19] *See* Tel-Optik Limited, *et al.*, FCC 85-89, (released April 5, 1985).

[20] *Ibid.*

& Rein. We do not believe that either ISI or Orion or any other separate satellite systems applicant will be prejudiced by our decision.

Public Benefits

39. On the basis of our analyses in our *Separate Systems* decision, we find that with respect to the type of information transmitted, the services now offered or planned by INTELSAT are generally comparable to those proposed by Cygnus, such as video, audio and data transmission services. We also find several crucial differences between Cygnus' proposed services and the services offered or planned by INTELSAT. First, with regard to satellite downlink power, we find that INTELSAT, as a general matter, cannot equal Cygnus in achieving combinations of earth station size, transmission rates, connectivity user control, security and costs that may be described by a user with special needs. Second, with regard to coverage and connectivity of satellites providing customer-premises services, we find that Cygnus' proposed network cannot be matched by INTELSAT. Third, Cygnus proposes to both sell and lease its space segment capacity whereas INTELSAT, which is permitted to sell its transponder capacity, only leases it. Cygnus' proposal to sell or lease space segment capacity on a non-tariffed basis will provide international users with the same benefits that domestic users have enjoyed as a result of the Commission's *Domestic Transponder* decision.[21] Private sale of space segment capacity will: (1) permit the providers of capacity to make tailored and flexible arrangements with customers that are not possible under the regimen of a tariffed service offering, (2) enable customers to make long-term plans for the use of facilities with assurance as to facility availability and price, (3) permit systems to be specifically designed to customer needs, and (4) result in positive market development for new and innovative service offerings. We found in our *Separate Systems* decision, as we did in authorizing private submarine cable facilities,[22] users with bulk capacity needs for special service requirements for international services should enjoy the same benefits.

40. Authorization of Cygnus' proposed separate system would provide those benefits to users of international satellite communications services that we have found in our *Separate Systems* decision would result from authorization of separate systems. Cygnus would provide currently unavailable service enhancements to users with special communications needs, stimulate technology and service development, and reduce user-costs. In addition, Cygnus' proposed system would offer to customers alternative suppliers to fulfill their special needs. We believe that

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[21] Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1251 (1982), *aff'd sub nom.* World Communications, Inc. v. FCC, 735 F. 2d 1465 (D. C. Cir. 1984).

[22] Tel-Optik Limited, *et al.*, FCC 85-99 (released April 5, 1985).

applying competitive pressure to INTELSAT within the limited service area outlined above would result in the future development of this market and encourage service innovation. Based on the fact that Cygnus' services would be limited within the confines of the Executive branch restrictions, and in view of our findings in our *Separate Systems* decision, we find that Cygnus' proposed system would not cause significant economic harm to INTELSAT.

41. With regard to Comsat's petition to deny the Cygnus application, we find on the basis of the record compiled both in this file and in the *Separate Systems* docket, that Comsat presents no factual allegations to show that grant of Cygnus' application would be inconsistent with the public interest convenience and necessity under Section 309(a) of the Communications Act of 1934. Therefore, pursuant to Section 309(d) of the Communications Act and Section 63.52(c) of the Commissions rules, we deny the petition to deny filed by Comsat.

42. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and (j), 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151-319 (1976), that Cygnus Satellite Corporation has forty-five days in which to file a modification or amendment to, or clarification of, its application in File No. CSS-84-002-P(LA) addressing the Commission's technical concerns discussed in paragraphs 30 through 36 above. Failure of Cygnus to submit such modification, amendment or clarification to the Commission within forty-five days will result in the dismissal of application File No. CSS-84-002-P(LA) without prejudice.

43. IT IS FURTHER ORDERED that, in the event a conditional authorization is issued, Cygnus shall not begin construction of the satellites until it has provided the Commission with a demonstration of Cygnus' current financial ability to meet the costs of construction and launch as well as operating expenses for one year following launch. Cygnus shall file this information with the Commission no later than sixty days following receipt by the Commission of a letter from the Department of State informing the Commission that the United States has completed its Article XIV(d) obligations with respect to the proposed system and instructing the Commission that it may proceed with final authorization of the system. Should these conditions not be timely satisfied upon the expiration of the sixty-day period following receipt of the State Department's letter, unless extended by the Commission for good cause shown, this order permitting construction shall become null and void.

44. IT IS FURTHER ORDERED that final authorization for both launch and operation of these satellites shall not be issued unless and until: (1) one or more foreign authorities authorize use of the system and enter into consultation procedures with the United States Party under Article XIV(d) of the INTELSAT Agreement to ensure technical compati-

bility and to avoid significant economic harm; and (2) the Department of State informs the Commission that the United States has completed its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system.

45. IT IS FURTHER ORDERED that as a condition of this order, in the event a conditional authorization is issued, Cygnus must file with the Commission copies of any operating agreements entered into by Cygnus within 30 days of execution.

46. IT IS FURTHER ORDERED that the petitions to deny filed by Communications Satellite Corporation, International Satellite, Inc. and Western Union Telegraph Co. ARE DENIED.

47. IT IS FURTHER ORDERED that the request of AT&T Communications, Inc. that the Commission clearly state herein that, should ISI's applications be granted, the Commission will not entertain any future request of Cygnus to compel common carriers to use its spare space segment capacity IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

*See FCC 85-398, in this volume, for Appendix A.

Comparative Coverage Issue
Merger and Drop Out Cases
Ownership and Management, Integration of

> No integration credit allowed to post-hearing merger applicant, since one merging applicant had not proposed any integration prior to merger. Media interests of limited partner considered as if held by general partner to prevent upgrading of limited partner's application. Cable TV and educational TV not considered under comparative signal coverage criterion.
> *—Daytona B/cing Co., Inc.*
> BC Docket No. 81-262

FCC 85-318

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In re Applications of

Daytona Broadcasting Company, Inc. Daytona Beach, Florida	BC Docket No. 81-262 File No. BPCT-800811KE
Life Style Broadcasting, Inc. Daytona Beach, Florida	BC Docket No. 81-263 File No. BPCT-800811KF
Daytona Beach Television Associates, Ltd. Daytona Beach, Florida	BC Docket No. 81-265 File No. BPCT-800811KH
For a Television Construction Permit	

MEMORANDUM OPINION AND ORDER

Adopted: June 13, 1985; Released: June 20, 1985

BY THE COMMISSION: COMMISSIONER RIVERA CONCURRING IN THE RESULT.

1. The Commission has before it: (a) Applications for Review of the Review Board's Decision herein,[1] filed May 21, 1984, by Daytona Broadcasting Company, Inc. (DBC) and Daytona Beach Television Associates, Ltd. (DBTA); (b) an Opposition filed June 11, 1984, by Life Style Broadcasting, Inc. (Life Style); and (c) a Reply filed June 21, 1984, by DBTA.[2]

2. This proceeding now involves the mutually exclusive applications of DBC, Life Style and DBTA for authority to construct a new television station on Channel 26 at Daytona Beach, Florida. DBTA is a limited partnership formed by the post-hearing merger of two other applicants, namely, Daytona Beach Family Television, Inc. (Family) and Daytona Beach Television Corp. (Television). Television holds a 60 percent ownership interest in DBTA and is the general partner. Family is the limited partner and holds a 40 percent ownership interest in DBTA. In its Decision, the Review Board (Board) awarded Life Style moderate and slight-to-moderate preferences over DBTA, and two slight-to-moderate preferences over DBC, under the diversification and comparative signal coverage criteria, respectively. DBTA received only slight preferences over both Life Style and DBC under the integration criterion, while Life Style received a very slight preference over DBC under that criterion. The Board, balancing the various comparative factors involved in this case, determined that the scales tipped in Life Style's favor. We concur with the Board that Life Style is the clear winner in this proceeding.[3] Except as modified or clarified by this Memorandum Opinion and Order, we adopt the Board's findings of fact and conclusions of law.

3. As mentioned, DBTA came into being as an applicant in this proceeding after the evidentiary hearings were completed and as a result

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[1] *Daytona Broadcasting Company, Inc.*, 97 F.C.C. 2d 212 (1984).

[2] Section 1.115(f) of our Rules provides that replies to oppositions to applications for review of Review Board Decisions may be filed only if requested by the Commission. Since the Commission did not request such a pleading, DBTA's Reply is unauthorized. Accordingly, it will be dismissed.

[3] Events occurring since the release of the Board's Decision have not changed our overall evaluation of the applicants. In this regard, the Board's Decision noted that one of DBTA's principals, Dr. R. Crants, Jr., had acquired a 40 percent interest in Station WMVP-TV, Mobile, Alabama. 97 F.C.C. 2d 212 at 223. An amendment filed May 21, 1984, reported that Dr. Crants had not acquired that interest because the planned sale of the station had not occurred. This change in circumstances does not affect the validity of the Board's overall evaluation of the three applicants herein under the diversification criterion, in light of DBTA's other media interests. Similarly, Life Style has received no comparative demerit under the diversification criterion because Mr. Richard Y. Clark, one of its principals, bought 200 shares of stock in Cowles Broadcasting, Inc., licensee of Station WESH-TV, Daytona Beach, Florida, after the release of the Board's Decision. When he reported this purchase to the Commission, Mr. Clark promised to divest himself of those shares prior to the time Life Style goes on the air. In fact, Mr. Clark has already sold those shares. *See* Life Style's amendment of February 12, 1985.

of a merger between two of the applicants which had been competing for the facilities here requested. This post-hearing merger has been opposed strenuously by the other parties in this case, and, for the reasons which follow, we believe some comment is warranted. As the Board noted, it appears that the Commission has never before allowed a merger in a comparative broadcast proceeding which was first proposed after hearings had commenced but which did not terminate consideration of the applicants under the standard comparative issue.[4] Moreover, once comparative applicants have been designated for hearing or "frozen" for comparative purposes, it becomes much more difficult to allow a merger and also preserve the Commission's policy against comparative upgrading. This was recognized by the Board when it stated that its allowance of the DBTA merger was narrowly based upon the peculiar facts of this case and that it did not intend to create a general policy of allowing applicants to combine their superior characteristics into a merged entity in the manner of a smorgasbord and thus upgrade the merged entity.[5] We concur with this statement. In this regard, applicants should be aware that any merger among competing applicants after designation which does not terminate the hearing will be closely scrutinized by us to prevent any improper upgrading of applications.

4. Consistent with the foregoing, we have closely examined the Board's comparative evaluation of DBTA, even though that merged applicant is not the comparative winner for the facilities here requested. As the Board noted, its overall approach in evaluating DBTA under the integration of ownership and management criterion and the diversification of control of mass media criterion set forth in our *Policy Statement on Comparative Broadcast Hearings*, 1 F.C.C. 2d 393 (1965), must also preserve the Commission's policy of preventing applicants in comparative hearings from upgrading their comparative qualifications once their applications have been designated for hearing and/or "frozen" for comparative purposes.[6] Thus, when the Board analyzed the applicants pursuant to our diversification criterion, it treated the media interests of the Family principals of DBTA as if they were held by principals of DBTA's general partner rather than being held by principals of DBTA's

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[4] There are reported cases involving choices between two proposed communities of license in which all competing applicants for one of the communities merged. *See, e.g., Lebanon Valley Radio*, 9 F.C.C. 2d 847 (Rev. Bd. 1967). Section 311(c) of the Communications Act of 1934, as amended, allows mergers of competing broadcast applicants during the period those applications are "pending" before the Commission. Section 311(c)(4) of the Act states that an application is deemed to be pending before the Commission from the time it is filed with the Commission until an order granting or denying the application is no longer subject to rehearing by the Commission or to review by any court.

[5] 97.F.C.C. 2d at 218 n. 15.

[6] *See* the Board's Decision, 97 F.C.C. 2d 212, at 214-18, and Section 73.3522 of our Rules.

limited partner, so that Family's application would not be unfairly upgraded.[7] We agree with this analysis.

5. However, the Board erred in awarding DBTA 20 percent integration credit on the basis that 20 percent of its general partner, Television, was integrated. It is true that Television's integration proposal was not upgraded; however, Family owns 40 percent of DBTA and DBTA was awarded 20 percent integration credit despite the fact that Family never proposed any integration in its application. In this light, notwithstanding the fact that Family is only a limited partner in DBTA, Family's application has been upgraded comparatively, contrary to relevant Commission policy and precedent. *See, e.g., Mid-Florida Television Corp.*, 76 F.C.C. 2d 158 (1980). To correct this error, we shall not award any integration credit to DBTA. Thus, Life Style is due a slight preference over both DBC and DBTA under the integration criterion, since Life Style is now the only applicant with any fulltime integration of ownership and management (7.2 percent). In all other respects, we concur with the Board's award of preferences to Life Style over DBTA and DBC under the diversification and comparative signal coverage criteria, which makes Life Style the clear winner in this proceeding.

6. There is yet another matter which warrants comment in light of recent events. The Board awarded Life Style a slight-to-moderate preference for its comparative signal coverage based in part upon the facts that it would provide 85,353 more viewers with third and fourth commercial television services than would DBC and 86,765 more viewers than would DBTA. In making this determination, the Board indicated that it would not consider service provided by noncommercial educational television stations[8] and cable television systems[9] under the comparative issue, because those types of service are significantly different from commercial television. The Board also noted that Life Style would provide a new service to 2.6 times as many viewers as DBC and 3.3 times as many viewers as DBTA.

7. DBC argues that the Board should have considered service by noncommercial stations as well as cable television systems in its assessment of comparative signal coverage by the applicants herein, because such service was considered, *inter alia*, in the Commission's recent Report and Order in *Children's Television Programming and Advertis-*

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[7] 97 F.C.C. 2d at 218-19 and 223.

[8] 97 F.C.C. 2d at 230 n. 42, citing *FBC, Inc.*, 95 F.C.C. 2d 256-61 (Rev. Bd. 1983).

[9] 97 F.C.C. 2d at 230 n. 42, citing *Elba Development Corp.*, 96 F.C.C. 2d 376, 383-85 (Rev. Bd. 1984), *review granted*, FCC 84-657, released January 7, 1985. In *Elba Development Corp., supra*, the Board relied upon the Commission's opinion in *Monroe County Board of Commissioners*, 72 F.C.C. 2d 683, 685-87 (1979), *aff'd sub nom. Telemedia Corp.* v. *FCC*, 697 F.2d 402, 411-13 (D.C. Cir. 1983). *Monroe County* explained that cable television is an entirely different type of service from television broadcast services.

ing Practices, 96 F.C.C. 2d 634 (1984). This argument is without merit. In the referenced Report and Order, the Commission refused to implement certain recommendations of its Childeren's Television Task Force that mandatory programming requirements should be imposed on commercial television licensees. One reason for this action was that cable television systems and noncommercial television stations already provide considerable children's programming.[10] In that Report and Order, the Commission was clearly focusing its attention on the amount of children's programming offered by different media, whereas in this proceeding we are concerned exclusively with the number of commercial signals received by audiences in certain areas.[11]

8. Recently, the Commission has also held that when an existing television licensee proposes to modify its facilities in such a way that a new white area[12] will be created, the Commission will consider whether persons residing in that new white area have alternative sources of video service, including cable television and low power television service.[13] Nonetheless, in those cases, the Commission focuses on whether *any* service will be available in a given area, whereas in the present case the Commission is concerned with persons who already have commercial television service and its inquiry focuses on the question of the extent to which certain persons will receive additional television signals. In brief, the Board was correct in not including service provided by educational stations as well as cable television systems in its assessment of the applicants' comparative signal coverage. We also observe that, even if Life Style were deemed not to deserve a preference for serving more underserved areas than its opponents, it would still receive a slight preference under the comparative coverage criterion because it will provide new service to 2.6 times as many viewers as DBC and 3.3 times as many viewers as DBTA. *See, e.g., Simon Geller*, 90 F.C.C. 2d 250, 268-69,

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[10] 96 F.C.C. 2d 634, 644-646.

[11] DBC also argues that since our Report and Order repealing the "Regional Concentration of Control" provisions of our multiple ownership rules, FCC 84-156, released May 1, 1984, cited the substantial growth of the cable television industry as a primary basis for our action therein, we should consider service provided by cable television systems in our assessment of the applicants' comparative coverage herein. We disagree. In the referenced rulemaking proceeding, we were considering whether one of our multiple ownership restrictions was necessary to encourage diversity of information sources throughout the United States, whereas in the proceeding now before us, we are addressing the more limited issue of which applicant will provide the most people with a new commercial television service and which applicant will provide signals to underserved populations. Thus, the considerations under the coverage issue in this proceeding are entirely different from those involved in the referenced rulemaking proceeding.

[12] A white area is an area not served by any Grade B television signals.

[13] *See KTVO, Inc.*, FCC 84-654, released December 28, 1984, and *Elba Development Corporation*, FCC 84-657, released January 7, 1985.

276 (1982), *remanded on other grounds sub nom., Committee for Community Access* v. *FCC*, 737 F.2d 74 (D.C. Cir. 1984).

9. ACCORDINGLY, IT IS ORDERED, That:

(a) the Application for Review of the Review Board's Decision herein filed May 21, 1984, by Daytona Beach Television Associates, Inc. IS DENIED pursuant to Section 1.115(g) of the Commission's Rules;

(b) the Application for Review of the Review Board's Decision herein filed May 21, 1984, by Daytona Broadcasting Company, Inc. IS GRANTED to the extent indicated in this Memorandum Opinion and Order and IS DENIED in all other respects pursuant to Section 1.115(g) of our Rules and the Review Board's Decision herein, *supra*, IS MODIFIED as reflected herein; and

(c) the Reply pleading filed June 21, 1984, by Daytona Beach Television Associates, Ltd. IS DISMISSED as an unauthorized pleading.

10. IT IS FURTHER ORDERED, That the application of Life Style Broadcasting, Inc. (File No. BPCT-800811KF) for a construction permit to establish a new television broadcast station at Daytona Beach, Florida, IS GRANTED; and the applications of Daytona Broadcasting Company, Inc. (File No. BPCT-800811KE) and Daytona Beach Television Associates, Ltd. (File No. BPTC-800811KH) ARE DENIED.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

Cellular Communications Systems
Comparative Criteria
Comparative Hearing
Mobile Radio Service, Cellular Applications

Initial Decision reversed, in favor of granting cellular nonwireline application where one applicant's proposed system covers more area and population than its opponent's. No other preferences were awarded.

—*ICS/MCI/CMS*
CC Docket No. 83-146

FCC 84-611

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In re Application of	CC Docket No. 83-146
ICS/MCI/CMS	File No. 26109-CL-P-(23)-82
Los Angeles Cellular Telephone	File No. 26083-CL-P-(24)-82
For a Construction Permit to establish a new cellular system operating on frequency Block A in the Domestic Public Cellular Radio Telecommunications Service to serve the Los Angeles, California, Metropolitan Statistical Area	

Appearances

Richard B. Severy, John M. Pelkey, Lawrence J. Movshin and *Jean Kiddoo* on behalf of ICS/MCI/CMS; *Arthur Blooston, Chase Libbey, Edward Kump, Joseph E. Killroy, Stephen A. Weiswasser* and *William S. D'Amico* on behalf of Los Angeles Cellular Telephone Company; and *James O. Juntilla, Robert W. Spangler, Jerry M. Hermele* and *Arthur I. Steinberg* on behalf of the Separated Trial Staff, Common Carrier Bureau, Federal Communications Commission.

FINAL DECISION

Adopted: December 4, 1984; Released: December 17, 1984

BY THE COMMISSION: COMMISSIONER QUELLO ISSUING A SEPARATE STATEMENT; COMMISSIONER DAWSON DISSENTING AND ISSUING A STATEMENT IN WHICH COMMISSIONER RIVERA JOINS; COMMISSIONER PATRICK CONCURRING IN THE RESULT.

I. Background

1. The captioned applicants have filed exceptions to the *Initial Decision* (I.D.) of Administrative Law Judge Walter C. Miller in the Los Angeles nonwireline cellular proceeding. *ICS/MCI/CMS,* FCC 84D-7, released February 10, 1984. The *I.D.* granted the application of ICS/MCI/CMS (ICS) and denied the mutually exclusive application of Los Angeles Cellular Telephone Company (LACTC). Judge Miller concluded that ICS' application was superior to LACTC's application under two of the three designated issues[1] and that granting the ICS application would serve the public interest, convenience and necessity. LACTC, ICS and the Separated Trial Staff of the Common Carrier Bureau (STS) filed exceptions to the *I.D.* For the reasons explained below, we reverse the *I.D.* and by this Final Decision grant the application of LACTC. Except as otherwise noted, the Findings of Fact and Conclusions of Law of the *I.D.* are incorporated by reference herein.

2. On March 5, 1983, the Common Carrier Bureau, acting pursuant to delegated authority, designated the mutually exclusive applications of ICS and LACTC for comparative hearing on the following issues:

(a) To determine on a comparative basis the geographic area and population that each applicant proposes to serve; to determine and compare the relative demand for the services proposed in said areas; and to determine and compare the ability of each applicant's cellular system to accommodate the anticipated demand for both local and roamer service;

(b) To determine on a comparative basis each applicant's proposal for expanding its system capacity in a coordinated manner within its proposed Cellular Geographic Service Area (CGSA) in order to meet anticipated increasing demand for local and roamer service;

(c) To determine on a comparative basis the nature and extent of the service proposed by each applicant, including each applicant's proposed rates, charges, maintenance, personnel, practices, classifications, regulations and facilities (including switching capabilities); and

(d) To determine, in light of the evidence adduced under the foregoing issues, what disposition of the referenced applications would best serve the public interest, convenience and necessity.[2]

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[1] See para. 2, *infra.*

The STS was also made a party to the proceeding.

3. Pursuant to the special procedures governing evaluation of cellular radio applications for the top-30 markets[3] the applicants filed their direct cases with their applications on June 7, 1982. Hearing sessions were held on October 13 and 14, 1983 and the record closed on October 24, 1983. The parties (including the STS) submitted their proposed Findings of Fact and Conclusions of Law on November 15, 1983, and their Replies on November 30, 1983.

4. In the *I.D.*, the ALJ gave LACTC a "very slight preference" under the area and population sub-issue within Issue (a). He awarded a slight preference to LACTC for its ability to accommodate demand for local service, and a moderate preference to ICS for ability to accommodate roamers. Based on the individual preferences, LACTC received a slight preference under Issue (a) as a whole. ICS was awarded a substantial preference under Issue (b) for its expansion proposal. On issue (c), the judge gave a slight preference to LACTC for its lower rate levels, and a substantial preference to ICS for its rate structure. Overall, the judge concluded that the ICS application was superior to LACTC's.

5. On March 13, 1984 ICS, LACTC and STS filed exceptions. LACTC and the STS except to almost every aspect of the *I.D.*, both concluding that LACTC should be granted the Los Angeles nonwireline cellular construction permit. ICS excepts to the finding that LACTC should be preferred on Issue (a). Replies were filed by each of the parties on March 28, 1984.

II. Issue (a)

6. This issue calls for a comparison of the geographic areas and population which the applicants propose to serve, the relative demand for service in these areas and the ability of each applicant's system to accommodate the anticipated demand for both local and roamer service. *See Rogers Radiocall, Inc.* (*Chicago Final Decision*), 55 RR 2d 1261 (1984), at para. 8, *recon. denied, Chicago Reconsideration Order*, 56 RR 2d 951 (1984), *appeal pending, Cellular Mobile Systems of Illinois, Inc. v. FCC*, No. 84-1456 (D.C. Cir. filed September 4, 1984); *MCI Cellular Telephone Company* (*Pittsburgh Final Decision*), 55 RR 2d 1215 (1984) at para. 9, *recon. denied, Pittsburgh Reconsideration Order*, 56 RR 2d 936 (1984), *appeal pending, Cellular Mobile Systems of Pennsylvania, Inc. v. FCC*, No. 84-1131 (D.C. Cir. April 5, 1984).

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[2] LIN Cellular Communications Corporation (Los Angeles Designation Order), 48 Fed. Reg. 9942 (Com. Car. Bur. 1983)

[3] Cellular Communications Systems, 89 FCC 2d 58, 87-91 (1982). *See also* 47 CRF 22.916 (b)(1).

7. *Geographic Area and Population.* The judge found that the Los Angeles MSA encompasses 32,146 square miles in Los Angeles, Orange, Riverside, and San Bernadino counties. The MSA's 1980 census population is 10,968,394. The following table provides the judge's findings with respect to the overall area and population served by each applicant.

	Geographic Area[4]		*Population*	
	Total Served	*Percentage of MSA*	*Total Population*	*Percentage of MSA*
LACTC	5,975 sq.mi.	18.6%	10,572,012	96.4%
ICS	5,958 sq.mi.	18.5%	10,529,833	96%

I.D., para. 7

8. The judge found the proposed service contours of both applicants to be almost identical. When comparing the applicants' proposed sites, the judge found that LACTC proposed one cell site which was not covered by ICS; he found that the service contours of all of the remaining 23 cells were identical.[5] *I.D.*, paras. 9-10. Cell 24 — the one cell proposed by LACTC and not by ICS — will serve 17 square miles and 42,179 people. Judge Miller found that this cell would cover a five-mile stretch of Highway 1 — a high traffic artery, and affluent, residential neighborhoods located in Los Angeles county's central core. Consequently, he awarded a "very slight preference" to LACTC for its marginally better coverage proposal. *I.D.*, paras. 57-58.

9. ICS argues that it should have been preferred on this issue for its superior CGSA coverage. It also contends that LACTC's 24th cell does not cover Highway 1, but rather covers an unnumbered coastal road. It further contends that LACTC should receive a demerit for this proposed cell because its cost cannot be justified by demand in the area it covers. LACTC objects to the judge's decision on this issue, arguing that its preference should be enhanced.

10. We agree with the judge's conclusion that LACTC should be preferred under this subissue. The proposed 39 dBu contours of both applicants are nearly identical; however, LACTC's system will cover 17 square miles of the Palos Verdes peninsula and 42,000 people that the ICS system will not.[6] The area of unique coverage includes part of San Pedro,

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[4] For purposes of comparison, the geographic area served is that area within the applicant's composite 39 dBu contours within the MSA. The percentages given are of the total area and population of the Los Angeles MSA.

[5] In fact, he found that the applicants propose identical antenna locations and engineering data for 22 of the 23 common cells. While the applicants did propose different antenna locations for one of these cells, their service contours ended up being the same.

[6] We reject ICS' argument that applicants should be compared on the basis of the area and population encompassed by their CGSA's, rather than by their service contours. Pursuant to the clear language of the designation order in this proceeding and in accordance with Commission decisions in all other cellular decisions, we have compared these systems on

and densely populated, affluent, residential neighborhoods.[7] Additionally, Judge Miller noted that the market studies relied on by both applicants found a clear correlation between high income and cellular demand. *I.D.* para. 11. Based on these findings we conclude that the area of unique coverage exhibits high indicia of cellular demand. Accordingly we concur with the judge's conclusion on this sub-issue with the limited exception that we believe that LACTC is entitled to a slight as opposed to very slight preference for its coverage proposal.

11. *Relative Demand for Service.* The applicants forecasted demand for cellular radio service in the Los Angeles MSA as follows:

Year of Operation	*ICS*	*LACTC*
Year 1	10,800	10,794
Year 2	23,300	18,596
Year 3	37,500	28,332
Year 4	54,300	40,204
Year 5	73,400	54,355

I.D., para. 12.

12. Judge Miller found that both applicants used identical research, conducted by Management Analysis Center Inc. (MAC) and Chilton Research Services Inc. (Chilton), as a starting point for their demand projections. Although the applicants used different supplementary surveys and applied the resultant data differently, they arrived at identical projections for total reliable market demand (189,500 units). The judge concluded, however, that both presentations contained market frailties. He found that ICS failed to establish a nexus between the MAC market research and its total reliable demand projection, and also failed to show a nexus between its total demand projections, and its yearly demand forecasts. Similarly, he found that LACTC failed to establish an adequate nexus between its research and its projections; particularly, he criticized LACTC for not providing record support for the parameters it used in its mathematical model to project demand. Consequently neither applicant was awarded a preference under this subissue. *I.D.*, paras. 12-26, 59-61.

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their 39 dBu contours rather than their CGSAs. *See* American Mobile Communications of Washington and Oregon, (Seattle Final Decision) 56 RR 2d 1090 (1984), at para. 11, *appeal pending*, American Mobile Communications of Washington and Oregon v. FCC, No. 84-1447 (D.C. Cir. filed August 29, 1984).

[7] Contrary to the judge's findings, the area covered by LACTC and not covered by ICS does not contain a five-mile stretch of Highway 1. Instead it contains a stretch of Highway 213. *See* LACTC Reply Exceptions p.9 n. 8. ICS has filed a motion to strike the referenced footnote arguing that it is beyond the record. We agree. LACTC's attempt to offer evidence concerning the traffic volume of a new highway after the close of the record goes far beyond merely correcting the record to reflect a mislabeling of Highway 1 and as such is not appropriate at this juncture.

13. Both applicants argue that the judge erred in failing to award a preference on this issue. ICS contends that it should have been awarded a preference because its demand assessment was more comprehensive and detailed than LACTC's. LACTC argues that its proposal was preferred by the STS and that the judge erred in not following its recommendations. In addition, it argues that it should have been awarded a preference under this subpart of issue (a) for its more detailed demonstration of a link between its market study, its demand forecast, and distribution of that demand.

14. While we agree with the judge's ultimate conclusion that neither applicant should be preferred on this subissue, we conclude that several of the judge's underlying conclusions should be modified. Any market demand study must contain certain assumptions which are not susceptible to proof in order to account for all relevant factors. *See Pittsburgh Final Decision, supra* at para. 22. Overall both applicants appear to have employed reasonable assumptions. The judge's major criticism of ICS is that ICS failed to explain how it arrived at its estimate of total realizable demand and how it converted its estimate to its five-year demand projection. While it is true that ICS did not provide extensive details to explain its computations, it did give a general explanation about the factors it used to formulate its projections, which we have found acceptable in previous cases. *See American Mobile Communications of Washington and Oregon (Portland Final Decision)* FCC 84-371, at para. 36, released August 24, 1984. With respect to its realizable demand projections, ICS adopted the figures arrived at by MAC.[8] Similarly, the record indicates that LACTC's mathematical model was developed using criteria similar to that used by ICS in formulating its projections and is equally sound. It should be noted that the applicants, using similar market research, albeit in a different manner, arrived at very similar conclusions. *I.D.*, para. 26. Since both applicants used the same initial research, applied this data in a fundamentally sound and valid manner, and arrived at very similar conclusions, no preferences will be awarded under this subissue.

15. *Ability to Accommodate Local Demand.* The judge awarded a slight preference to LACTC under this subissue. In so doing, the judge noted that both systems can serve the anticipated first year demand at a grade of service of 0.02 Erlang B or better, that both are designed with an idealized grid structure and both will avoid significant co-channel interference during the first year of operation. Additionally, both applicants proposed to sectorize during the second year using a four-cell frequency reuse pattern. Except for cells 14, 15, and 16, both will use the same

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[8] A typographical error resulted in the judge's confusion as to how ICS arrived at its demand projection of 161,300: as explained by ICS in its reply finding this figure should have been 163,300. ICS *Reply* Findings, p. 8, n. 16.

signalling channels and the same voice frequency sets on cells 1 through 23 for years 2 through 5. However, the judge awarded LACTC a slight preference because, he found, ICS failed to provide any estimate of the average traffic load per user during peak hours. *I.D.*, paras 27-35, 62.

16. ICS argues that it should not have received a demerit for failing to provide the average traffic load per subscriber, arguing that this information could have been mathematically derived from the underlying data presented in Exhibit 5 of its direct case. ICS contends further that it should have been preferred under this issue because it has a better understanding of the demand for cellular service in the Los Angeles SMSA as a result of its more comprehensive need assessment. LACTC also excepts on this issue, arguing that it should have received a preference based upon its proposal to provide a portable cell site to accommodate emergency situations or temporary increases in anticipated demand, as well as for its "superior ability to provide service to portable units."

17. We conclude that no preference should be awarded to either applicant for this subissue. The judge found, and we agree, that both systems would operate omni-directionally during the first year with sufficient subscriber capacity to serve the anticipated first year demand at a grade of service of 0.02 Erlang B or better. The sole basis for the judge's award of a slight preference to LACTC was ICS' apparent failure to provide an estimate of the average traffic load per subscriber. However, as pointed out by ICS in its exceptions, this information can be readily calculated from the underlying data presented in its direct case. When these calculations are performed, it is apparent that ICS assumed the same average traffic load per subscriber that was used by LACTC. Consequently, the judge should not have awarded LACTC a preference on this basis.[9]

18. We reject each party's request that it be awarded a preference. We will not award LACTC a preference for its portable cell because LACTC provided very little detail about this proposal and because both applicants have made adequate provisions to guard against cell failure or temporary unanticipated demand.[10] Similarly, we reject LACTC's claim to a preference for better service to portables. LACTC has not demonstrated that ICS' service to portables will be inadequate. *See Pittsburgh Final Decision, supra,* at para. 42. We also reject ICS' argument that it should receive a preference for its ability to accommodate demand because it

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[9] In addition, to the extent that the judge considered "an idealized grid structure" to be a comparative factor, this reliance is reversed. As we have explained in the Pittsburgh Final Decision, *supra,* at para. 40, there is no fundamental design requirement that cells be uniformly spaced.

[10] *See* ICS Ex. IV, p.11. *See also* LACTC Ex.2, p.23; Ex. 39, p.5.

provided a more comprehensive need assessment. We have already found that both of the underlying need showings are adequate. Overall, we find that each proposal is capable of meeting the demand levels predicted and, therefore, no one will be given a preference. *See American Mobile Communications of Washington and Oregon (Portland Proceeding),* FCC 84-371, released August 24, 1984, at paras. 37-53.

19. *Ability to Accommodate Anticipated Roamer Service Demand.* The judge found that both LACTC and ICS propose to provide service to roamers registered with their Los Angeles systems. However, he awarded a preference to ICS because ICS' proposal was not linked to the creation of the nationwide registration system, and because he found that ICS' proposal better signified its intention to offer service to roamers at the outset of its operations. *I.D.*, para. 63. LACTC argues that no preference should be awarded to either applicant because both will offer full roamer service at the outset.

20. We reverse the award of a preference to ICS for its roamer proposal. As discussed in the *I.D.*, paras 36-37, both applicants will offer various levels of service to roamers including, but not limited to, nationwide registration. In any event, these factors address the treatment to be accorded roamers and not the applicants' ability to accommodate the anticipated demand for roamer service. Accordingly these arguments are not relevant to a comparison of the applicants on this issue. *See Chicago Final Decision, supra,* at para. 31. Consequently, the preference awarded to LACTC on this subissue is eliminated.

III. Issue (b)

21. *Expansion plans.* This issue calls for a comparison of each applicant's proposal for expanding its system capacity in a coordinated manner to meet increasing demand. *See Pittsburgh Final Decision, supra,* at para. 33; *Chicago Final Decision, supra,* at para. 30. The judge awarded a substantial preference to ICS on this issue. While finding that the parties have advanced similar proposals, he concluded that LACTC's proposal is markedly inferior to ICS'. He found that LACTC's system will experience significant adjacent signalling channel interference in substantial portions of Cells 13 and 15 beginning in year 3. He also found that ICS' general five step method will allow for "coordinated system expansion" and, therefore, demonstrates a better understanding of cellular design principles. *I.D.*, paras. 65-69.

22. LACTC disputes that its assignment of adjacent signalling channels in adjacent cells will necessarily result in interference and contends, in the alternative, that ICS' system would suffer from any such infirmity to the same degree. It also contends that, pursuant to the Commission's decisions in the *Pittsburgh* and *Chicago* cellular proceedings, no one should receive a demerit on the basis of intra-system interference. LACTC

also argues that its system expansion plan is more detailed and specific in several critical areas and consequently superior to ICS'. It argues further that ICS proposes to utilize a hybrid expansion plan which will "require massive redesign". ICS argues that, in addition to LACTC's interference problem, LACTC's switch is inadequate to meet the forecasted demand beyond the second year. ICS also argues that its system will have greater trunking efficiency.

23. After evaluating the proposals submitted in this proceeding in accordance with our previous cellular decisions, we conclude that neither applicant should be awarded a preference on this issue. Both applicants propose similar expansion plans. The two proposals use essentially the same channel group assignment plan in year 2 to implement split cells in approximately the same locations, and continually monitor their systems to determine when expansion is needed. There also is no significant difference between ICS' five-step plan and LACTC's four-step plan. In addition, as LACTC correctly points out, both applications propose adjacent signalling channels in adjacent cells. Thus, LACTC should not have been penalized for this factor. In any event, as we indicated in the *Chicago Final Decision, supra,* at para. 29, intra-system signalling channel interference is not decisionally significant because it can be readily resolved by the licensee. Similarly, LACTC has adequately explained that, if its original switch is inadequate, it is prepared to use tandem switches to accommodate any overflow.

24. We reject ICS' arguments that its expansion plan should be preferred because of its purported greater trunking efficiency. In essence ICS is arguing that its four-cell three-sector expansion approach be preferred over LACTC's four-cell six-sector system.[11] In view of our policy of encouraging the development of alternative technical design approaches that comport with our broad cellular design concepts, we do not prefer one system approach over another. *See Chicago Final Decision, supra,* at para. 38. Since each of these systems proposes a feasible cellular design, we view each approach as different, not better than, the other proposal. Similarly, we reject LACTC's argument that ICS' proposal lacks sufficient detail to be considered a *bona fide* system plan. ICS has provided sufficient information to demonstrate that it has presented a workable expansion proposal. In view of the foregoing, no preferences will be awarded on this issue.

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[11] Both applicants' expansion plans are adequate for their projected demand. Consistent with our Chicago Final Decision, *supra,* at paras. 38-39, we will not award a preference for an expansion plan unless one applicant's plan will be able to accommodate anticipated growth and the other's will not. We see no public interest benefit in the weighing of theoretical advantages of different approaches to the same goal: When both expansion plans will fully accomplish their goals, neither is "better."

IV. Issue (c)

25. Issue (c) requires a comparison of the nature and extent of services proposed by each applicant, including rates and charges, maintenance, personnel, practices, classification, regulations and facilities (including switching facilities). *See Pittsburgh Final Decision, supra,* at para. 46, *Chicago Final Decision, supra,* at para. 44. In *Cellular Communications Systems* we indicated that this issue is not as significant as Issues (a) and (b), 86 FCC 2d at 503.

26. The judge found that both applicants developed usage sensitive rates that combine charges for system access with incremental charges for air time, provide time of day (peak/off-peak) pricing, and to some degree offer service on an unbundled basis. However, he awarded LACTC a slight preference for its lower proposed rate levels, and ICS a preference for its superior rate structure. The judge found ICS' rate proposal to be superior to LACTC's in two respects. First he asserts that it is more detailed regarding charges for specialized service features and secondly, it has detailed its roamer service charges. Finally, he concluded that both applicants proposed adequate maintenance and personnel plans, technically acceptable facilities, and theoretically viable maintenance plans, none of which is deserving of a comparative preference. Based on the foregoing, the judge awarded a substantial comparative preference to ICS for Issue (c) as a whole. *I.D.,* paras. 70-74.

27. Both parties except to this Conclusion. ICS contends that LACTC should not have been awarded a slight preference for its lower rate levels because its proposal contains unjustified bulk discounts and because LACTC will "pass-through" intra-CGSA toll charges.[12] It argues further that it should have received a preference for its "superior implementation and operational proposal." LACTC argues that it is entitled to a substantial preference for proposing a cost justified lower rate level. It also claims that the judge failed to properly consider evidence concerning its maintenance and personnel plans.

28. We find no evidence upon which to support the award of a preference to either party. The information provided by LACTC concerning its rate levels is insufficient to constitute an adequate cost-justified methodology.[13] Similarly, ICS' provision of rates for roamers and specialized services is not a sufficient reason to award a preference for its rate structure. In other cellular proceedings we have awarded preferences for

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[12] In its reply, LACTC denies that it will "pass-through" intra-CGSA toll charges.

[13] As we indicated in our Pittsburgh Final Decision, *supra,* at para. 52, where an applicant's proposed rates and charges are based upon an established methodology that reasonably anticipates all the applicant's costs, we will consider an applicant's proposed rates. In all other instances, such proposed rates are too unrealistic to warrant our consideration.

rate structure for purposes which promote the Commission's policy of encouraging efficient use of cellular system capacity through usage-sensitive, cost-based pricing. *See Chicago Final Decision, supra,* at para. 48; *Pittsburgh Final Decision, supra,* at para. 51. Both ICS' and LACTC's rate proposals consider these factors; ICS' detailing of the rates for roamers or its specialized services contribute nothing toward the Commission's goals in this regard. Accordingly, the applicants' rate proposals are comparable on the issue. Similarly, we have reviewed the maintenance and personnel proposal of both applicants, and we cannot find that either applicant's proposals will measurably affect its ability to implement its overall proposal. *See Chicago Final Decision, supra,* at para. 51.

Procedural Matters

29. ICS has filed a motion to reopen the record, in order to put into evidence the service area map of Los Angeles SMSA Limited Partnership, the wireline cellular carrier in Los Angeles, in order to rebut LACTC's argument that it will not be competitive with the wireline carrier. We deny this motion. An applicant, once licensed, may expand its system within its SMSA as market conditions dictate. *See La Star Cellular Telephone Co.,* CC Mimeo 6904, released October 1, 1984, *review pending. See also Cellular Lottery Proceeding,* 55 RR 2d 823 at para. 54 n.82 (1984), *recon pending.* Consequently, a comparison of applicants on this issue would not be of decisional significance and has not been undertaken in this case.

V. Conclusion

30. In view of the foregoing, we conclude that on a comparative basis LACTC's application is superior to ICS's and the public interest, convenience and necessity will be better served by a grant of the LACTC application.

31. ACCORDINGLY, IT IS ORDERED the application of Los Angeles Cellular Telephone Company (File No. 26183-CL-P-(24)-82) IS GRANTED and the application of ICS/MCI/CMS (File No. 26109-CL-P-(23)-82) IS DENIED.

32. IT IS FURTHER ORDERED, that the Motion to Reopen the Record filed by ICS/MCI/CMS, IS DENIED.

33. IT IS FURTHER ORDERED, that the Motion to Strike filed by ICS/MCI/CMS, IS GRANTED.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

SEPARATE STATEMENT OF COMMISSIONER JAMES H. QUELLO

In re: Final Decision in ICS/MCI/CMS (Los Angeles Cellular Proceeding), CC Docket 83-146.

I am concerned that the Commission has been so thorough in eliminating issues from comparative hearings involving cellular radio licensees[1] that it has left itself very little basis upon which to distinguish applicants. No one would dispute that the distinction in geographic and population coverage which serves as the basis for deciding this case represents only a slight difference between these applicants. Nevertheless, under the restricted criteria that the Commission has chosen to employ, I believe that this distinction does present sufficient ground for making a rational decision.

Accordingly, I support the decision.

DISSENTING STATEMENT OF COMMISSIONER MIMI WEYFORTH DAWSON IN WHICH COMMISSIONER HENRY M. RIVERA JOINS

I must dissent from the majority's attempt to rationalize a comparative choice in this cellular case when the applicants are essentially equal under our comparative criteria. As I have stated before, when there are no significant differences in the qualifications of the competing applicants, we should not make an artificial comparative decision based on factors that are insignificant and irrelevant to the operation of the proposed systems. Under such circumstances, as the Commission has already acknowledged, a "tie breaker" lottery is appropriate to select the licensee.[1]

In the instant case, LACTC and ICS, the competing applicants, are essentially equal. Their proposed service contours are almost identical. The antenna locations and engineering data for 22 of the 23 common cells are identical. Both applicants used identical research by the same firms to arrive at identical demand projections. Both systems would operate omnidirectionally with sufficient subscriber capacity to serve first year demand at a grade of service of 0.02 Erlang B or better. Both applicants would offer service to roamers. Both propose similar expansion plans. Both present comparable rate proposals. Both can be relied on to design cellular systems that are responsive to the particular needs of the Los Angeles market.

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[1] *Rogers Radiocall, Inc.* (*Chicago Final Decision*), 55 RR 2d 1261 (1984), *recon. denied,* 56 RR 2d 951 (1984), *appeal pending, Cellular Mobile Systems of Illinois, Inc. v. FCC,* No. 84-1456 (D.C. Cir. filed September 4, 1984); *MCI Cellular Telephone Company* (*Pittsburgh Final Decision*), 55 RR 2d 1215 (1984), *recon. denied,* 56 RR 2d 936 (1984), *appeal pending, Cellular Mobile Systems of Pennsylvania, Inc. v. FCC,* No. 84-1131 (D.C. Cir. filed April 5, 1984)

[1] See, *e.g. MCI Cellular Telephone Co.,* 55 RR2d 1215 (1984) at para. 57, *recon. denied, Pittsburgh Reconsideration Order,* 56 RR2d 936 (1984), *appeal pending, Cellular Mobile Systems of Pennsylvania, Inc. v. FCC,* No. 84-1131 (D.C. Cir., April 5, 1984); Cf., *Gencom, Inc.,* FCC 84-476, ____, FCC 2d ____ (1984) (Dawson, C., dissenting).

In light of the obvious similarities in these two proposals, neither LACTC nor ICS was entitled to any comparative preference on the issues involving relative demand, ability to accommodate demand, rates, charges, practices, expansion plans, maintenance, personnel or facilities. And no such credit is awarded by the majority. Rather, the majority grants LACTC's application based only on a single "slight" preference on a subelement of an issue, "Geographic Area and Population." LACTC proposes to serve *.4%* more of the population (42,179 people out of a total of 10,968,394 people) and *.1%* more of the MSA (17 square miles out of a total of 32,146 square miles) than ICS. In other words, LACTC proposes to serve 4/1000 more people than ICS and a 1/1000 larger area. This is the only distinction between these two proposals.

This admittedly "slight" difference between the LACTC and ICS proposals is insignificant and wholly unrelated to the public interest. More incredibly, it is based on a proposal that may never be implemented.[2] Both LACTC and ICS have submitted CGSAs that include the 17 square mile area in question. At the time of filing its application, LACTC proposed to cover the area within its 39 dbu contours; ICS did not. However, either applicant may modify its 39 dbu contours in the future so long as it continues to cover at least 75% of its total CGSA. 22 C.F.R. Sections 22.117, 22.903. If service to the 17 square mile area is warranted based on marketplace demand, ICS could, and undoubtedly would, decide to expand its contours within its CGSA and serve the area. If service to the area is not warranted, LACTC may never even offer it. Either way, it is meaningless to make a comparative decision based solely on a minor contour distinction that is subject to change in the future.

Los Angeles is a major cellular market. Millions of dollars are at stake in this proceeding. I will not pretend to make a comparative decision between LACTC and ICS when there are no real differences in their qualifications or proposals. The licensee should be selected by lottery. Accordingly, I respectfully dissent.

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[2] The Commission has recognized that the systems that are ultimately built may differ in many respects from those that are proposed. See, *Rogers Radiocall, Inc.*, 55 RR2d 1261 (1984), at para. 42, *recon. denied, Chicago Reconsideration Order*, 56 RR2d 951 (1984), *appeal pending, Cellular Mobile Systems of Illinois, Inc. v. FCC*, No. 84-1456 (D.C. Cir. filed September 4, 1984).

FCC 84D-7

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In re Applications of	CC Docket No. 83-146
ICS/MCI/CMS	File No. 26109-CL-P-(23)-82
Los Angeles Cellular Telephone Company	File No. 26083-CL-P-(24)-82
For a Construction Permit to establish a Cellular System to operate on frequency Block A in the Domestic Public Cellular Radio Telecommunications Service to serve the Los Angeles, California, Standard Metropolitan Statistical Area.	

Appearances

John M. Pelky, Richard Severy, Lawrence J. Movshin and *Jean L. Kiddoo* on behalf of ICS/MCI/CMS; *Arthur Blooston, Chase Libbey, Edward Kump, Stephen Weisswasser* and *Joseph E. Kiliory* on behalf of Los Angeles Cellular Telephone Company; *Arthur I. Steinberg* and *Jerry Hermele* on behalf of the Separated Trial Staff, Common Carrier Bureau, Federal Communications Commission.

INITIAL DECISION OF ADMINISTRATIVE LAW JUDGE
WALTER C. MILLER

Issued: February 8, 1984; Released: February 10, 1984

Preliminary Statement

1. This proceeding involves the mutually exclusive applications of ICS/MCI/CMS (ICS) and Los Angeles Cellular Telephone Company (LACTC). Each seek authority to construct and operate a new cellular system operating on frequency Block A in the Domestic Public Cellular Radio Telecommunications Service to serve the Los Angeles, California Standard Metropolitan Statistical Area. (SMSA).

2. The Chief, Common Carrier Bureau designated the case for hearing (48 F.R. 9942, published March 9, 1983). He called for evidence on the following issues:

(a) To determine on a comparative basis the geographic area and population that each applicant proposes to serve; to determine and compare the relative demand for the services proposed in said areas; and to determine and compare the ability of each applicant's cellular system to accommodate the anticipated demand for both local and roamer service;

(b) To determine on a comparative basis each applicant's proposal for expanding its system capacity in a coordinated manner within its proposed CGSA (Cellular Graphic Service Area) in order to meet anticipated increasing demand for local and roamer service;

(c) To determine on a comparative basis the nature and extent of the service proposed by each applicant, including each applicant's rates, charges, maintenance, personnel, practices, and classifications, regulations and facilities including switching capabilities; and

(d) To determine, in light of the evidence adduced under the foregoing issues, what disposition of the referenced applications would best serve the public interest, convenience and necessity.

3. After the parties had submitted their direct and rebuttal cases, hearing sessions were held on October 13 and 14, 1983. The record was closed on October 24, 1983 (FCC 83M-3800). The parties (including the Trial Staff) submitted their Proposed Findings of Fact and Conclusions of Law on November 15, 1983, and their Replies on November 30, 1983.

Findings of Fact[1]

Description of the Applicants

4. *ICS.* ICS is a joint venture of ICS/MCI, a general partnership, and Cellular Mobile Systems of California, Inc. (CMS). Originally adversaries ICS/MCI and CMS entered into a partnership. It was agreed that ICS/MCI would continue to prosecute its application as amended and CMS would dismiss its application. The settlement agreement was approved on October 13, 1983 (FCC 83M-3594).

5. ICS (the new partnership entity) is owned 75% by ICS/MCI and 25% by CMS. ICS/MCI, in turn, is owned by MCI LA Cellular, Inc. and 20% by ICS Communications.[2] CMS is a wholly-owned subsidiary of Cellular Mobile Systems, Inc.[3]

6. *LACTC.* LACTC is a partnership formed by Los Angeles Cellular Corporation (LACC) and LIN Cellular Communications Corporation (LIN).

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[1] Record references are as follows: All references to direct case testimony are identified by sponsor and exhibit number; e.g. LACTC Ex. 1, p. 1; ICS Ex. 1, p. 1. ICS' direct case exhibits bear both a page number and an exhibit number (e.g. page 5-1 is the first page of Direct Case Exhibit 5). But this would be cited here as ICS Ex. 5, p. 1. All references to Proposed Findings are identified for example, LACTC P.F., P1. Rebuttal Testimony references are identified as e.g., LACTC R. Ex. 1. Any references to the filed applications are identified as e.g. LACTC App. Ex. 1, p. 1.

[2] MCI is a subsidiary of MCI Communications Corporation and ICS is wholly-owned by Metromedia, Inc.

[3] Cellular Mobile Systems, Inc. is wholly owned by Graphic Scanning Inc.

This partnership is also the result of a settlement agreement in this case (FCC 83M-2502, released July 29, 1983). LACC and LIN will share control of LACTC equally, although LACC will own 65% of the partnership and LIN 35%.[4]

Issue A

7. *Geographic Areas and Populations.* The modified Los Angeles, California SMSA consists of four counties: Los Angeles, Orange, Riverside, and San Bernardino. It has a total area of 32,146 square miles, and a 1980 census population of 10,968,394. ICS would cover 18.5% of the SMSA's geographic area while LACTC would cover 18.6%. ICS' composite 39 dBu contour would embrace 5,958 square miles and 10,529,833 people; i.e., 96% of the SMSA's population.

8. LACTC would cover 5,975 square miles and 10,572,012 people; i.e., 96.4% of the SMSA's population. So LACTC will serve 17 more square miles than ICS and 42,179 more people.

9. The proposed 39 dBu contours of both applicants are almost identical. When you compare the applicants' proposed sites 1 through 23,[5] you discover, that with the exception of cell #5, the sites share common site locations, engineering data, and 39 dBu contours. Moreover, the differences in the cell 5 locations doesn't affect the location of its 39 dBu contour.

10. The 17 square miles and 42,179 people that LACTC would cover that ICS does not lies in the area of the Palo Verdes peninsula.[6] It includes part of San Pedro; a five-mile stretch of Highway 1, a high traffic artery; and affluent, residential neighborhoods located in the central core area of Los Angeles County. These affluent, residential neighborhoods are among the more densely populated in the SMSA.

11. The market study that both LACTC and ICS rely on surveyed households throughout the Los Angeles SMSA, and it concluded, *inter alia,* that a clear correlation exists between higher income and cellular demand. Moreover, in distributing demand, LACTC considered the population density in the Los Angeles County central core area.[7]

12. *Relative Demand for Service.* Both applicants commissioned and conducted studies to determine relative demand for cellular radio service

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[4] LACC is owned by Mobile Communications Corporation of America (MCCA), Los Angeles RCC's, Inc., Western Union Telegraph Company, and FMI Financial Corporation.

[5] The applicants have assigned the same numbers to their corresponding cells 1 through 23.

[6] This is the 39 dBu area and population embraced by LACTC proposed cell 24.

[7] ICS asserts that LACTC has failed to establish a need for the service in the differential area and so runs afoul of *Houston Mobilfone, Inc.*, 65 FCC 2d 848, 860 and n.35 (Rev. Bd. 1977), *rev. denied,* FCC 78-477 (July 11, 1978), *remanded sub. nom. Mobilfone Service Inc.* v. *FCC,* 605 F.2d 572 (1979), *aff'd Houston Mobilfone, Inc.* 78 FCC 2d 1067 (1980). That assertion is rejected.

in the Los Angeles SMSA. The following table summarizes the forecasted demand in terms of numbers of subscribers:

Year of Operation	*ICS*	*LACTC*
Year 1	10,800	10,794
Year 2	23,300	18,596
Year 3	37,500	28,332
Year 4	54,300	40,204
Year 5	73,400	54,355

13. *ICS*. ICS did several things to determine the public need for its proposed service offerings: It: (1) surveyed the general population by mail; (2) surveyed selected industries by mail; (3) conducted a telephone survey of those who responded to the mail survey; (4) held focus group sessions; and (5) surveyed other prospective cellular subscribers — including customers of various mobile radio services (ICS Ex. 33, p. 7, 16-32).

14. ICS commissioned an organization, Management Analysis Center, Inc. (MAC), to conduct the mail survey and selected industry survey. MAC also analyzed the Los Angeles SMSA demographically (ICS Vol. 3, App. 1). Another company, Chilton Research Services, Inc. conducted the telephone survey (ICS, Vol. 3, App. 1, p. 23).[8]

15. In its two mail surveys (Para. 13-1 and 13-2 *supra*), MAC addressed the interest in both portable and mobile telephones, the use of phones for personal or business purposes, the likelihood of subscribing to cellular service at different prices, and the respondent's previous experience with telecommunications services.

16. First MAC randomly mailed a survey form to 17,900 households in the Los Angeles SMSA with incomes of $20,000 or more (ICS, Vol. 3, App. 1, p. 3.5, and 3.9). Respondents were asked *inter alia*, if they would consider personal use at $175, $150, $125 or $90 per month. 870 households responded. Respondents who expressed no interest in cellular were asked if they would subscribe during the next five years at a cost of $50 per month (ICS Vol. 3, App. 1).

17. Next, MAC mailed 8,700 questionnaires to four occupational groups it believed to be high potential users of the service. They too were asked, *inter alia*, if they would consider using the service at the various price levels — except that the $125 option was omitted. 425 people in these four groups responded. Of all the mail respondents, 506 of them agreed to a telephone interview and MAC completed 365 telephone interviews — 214 with households and 151 with business.

18. MAC measured a respondent's intention to subscribe on a four-tier multiple response scale (definitely subscribe, probably subscribe, proba-

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[8] LACTC also relied on the MAC study and the Chilton survey (LACTC Ex. 25).

bly not subscribe, definitely not subscribe). It next applied an intent translation scale to the expressed intentions to subscribe and divided to get the total potential market demand. Then, assuming that the non-wireline applicant would capture 50 percent of the market, MAC arrived at the non-wireline share of demand.

19. ICS also commissioned Lieber Attitude Research, Inc. (LAR) to conduct a series of "focus group" sessions. See para. 13(4) *supra*. The purpose of these sessions was to study the attitudes and needs of potential subscribers (ICS Vol. 3, App. 2, p. 2).[9] LAR held two such focus group sessions in Los Angeles.

20. ICS also conducted an additional mail survey to ascertain the demand for specific service enhancements. It mailed surveys to both individuals and businesses, some of whom currently use conventional mobile telephone and other two-way radio services (ICS Ex. 33, p. 7, 28). Of those respondents who indicated a need for cellular service, the following percentages expressed an interest in specific service enhancements: call-forwarding (63.8%); least routing of long-distance calls (58.1%); no-answer transfer (56.4%); call waiting (56%); message center (36.1%); three-party conference calling (35.2%); voice mailbox (23.3%); secretarial services (11.9%); abbreviated dialing (68.3%); and automatic redialing (64.8%). Based on this survey, along with the information obtained from the focus group sessions (para. 19 *supra*), ICS proposes to offer customers a number of enhanced service features (ICS Ex. 10, p. 1-10; Ex. 21, p. 1-10).

21. Finally, ICS polled the boating community. 75% of the boat owners expressed an interest in cellular for their boats. So ICS anticipates a demand for cellular telephones in the maritime community (ICS Ex. 33, pp. 30-32; Ex. 17A, p. 11).

22. *LACTC.* LACTC also relied on MAC's extensive market research. See Footnote 8 *supra*. However, it used the data differently. It relied on a mathematical model to forecast demand. It selected a new product adoption model based on the Bass Mathematical Model (LACTC Ex. 25, Attach 25-B). The Bass Model provides a quantitative means for projecting consumer acceptance of new products, in part through data derived from related products. However, to use the Bass Model the user must provide estimates of two model parameters; specifically, the coefficients of innovation and initiation as well as an estimate of total demand when the market is saturated. There is no record support for the coefficients LACTC selected or for its total demand estimate at market saturation (ICS R. Ex. 3, p. 61).

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[9] Focus groups are semi-structured sessions in which a small group of likely consumers are asked their perceptions and attitudes concerning a specific product or concept.

23. Besides the MAC study LACTC also relies on a survey that Intrastate Radiotelephone, Inc. of Los Angeles (Intrastate) conducted. Intrastate, a radio common carrier and subsidiary of MCCA,[10] surveyed more than 2,000 of its subscribers to determine their interest. LACTC doesn't describe the survey in any detail, but it claims that it confirms the MAC study findings.

24. Based on the MAC studies, and at $90 per month, ICS' share of the Los Angeles Cellular market for year 1 is estimated at 189,500 subscribers. However, ICS has also stated that its public need survey's estimated realizable demand will be only 161,300 as of mid-1985 (ICS Ex. 34, p. 2).[11] ICS doesn't explain or even attempt to explain how it arrived at the 161,300 figure given MAC's estimate of 189,500 first year subscribers. Nor does it explain how it translated the 161,300 figure into a first year subscriber estimate of 10,800 (see para. 12 *supra*).

25. LACTC revised the MAC study and arrived at a similar realizable demand figure of 161,700. It did so by multiplying MAC's 189,500 figure by 0.929 to account for 7.1% of the Los Angeles potential subscribers who will not be within the proposed coverage area (LACTC Ex. 25, Attach. B., p. 4.32 - 4.33).

26. In summary, the applicants submitted MAC studies that were nearly identical. In fact, for projections of total market demand they are identical. But ICS' market demand analysis differs in two major respects. First, as previously noted, ICS didn't adopt the MAC demand projection figures. Instead it adopted the 161,300 figure without any explanation. Secondly, ICS failed to apply a market acceptance factor to the potential demand figure it did adopt. This means that ICS has failed to show a nexus between its estimate of potential demand and its forecast of actual demand by the use of any explicit market penetration or analysis (LACTC Ex. 25, Attach. 25-B, pp. 4.31-4.33). Even apart from the first year figure, ICS' subscriber projections don't appear to be based on its market study (see para. 12 *supra*). ICS contends that its subscriber forecasts are "a reasonable projection based on experience" and were determined on the basis of elasticity of demand and changes in service and equipment prices over time; the introduction of new features and service capabilities, the impact of distributions, dealers, and results; changes in customer usage patterns and preferences; evolving traffic patterns; pent-up and latent demand; and population and industrial development (ICS Ex. 34, p. 2).

27. *The ability to Accommodate Anticipated Demand.* As previously explained (para. 9 *supra*), ICS and LACTC propose nearly identical 39 dBu

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[10] See Footnote 4 *supra.*

[11] ICS assumed that it would begin service in Los Angeles during mid-1984 (ICS Ex. 34, p. 2).

contours. Only in the case of LACTC's proposed cell 24 do the proposals differ (para. 10 and Footnote 6, *supra*).

28. Both applicants propose to construct their full systems and to operate them omni-directionally during year one with enough subscriber capacity to meet demand through the end of that year. ICS will initially employ 23 signalling and 436 voice channels in its 23 cell systems. LACTC's 24 cell system will employ 24 signalling and 440 voice channels (ICS Ex. 37, p. 2, 4; LACTC Ex. 39, p. 1, 3). Both propose detailed and specific frequency assignment plans for years 1 through 5 (ICS Ex. 5, p. 19, 28-62; LACTC Ex. 15, Tables 15.1-15.61).

29. Both applicants propose to sectorize during the second year using a four cell frequency reuse pattern. ICS will use three 120-degree sectors per cell. LACTC will use six 60-degree sectors per cell (ICS Ex. 37, p. 14; LACTC Ex. 15, p. 3). Except for cells 14, 15 and 16, both will use the same signalling channel and the same voice frequency sets on cells 1 through 23 for years 2 through 5.

30. On cells 14, 15 and 16, the following chart shows the differences (ICS Ex. 5, p. 43-62; LACTC Ex. 15, Tables 15.2-15.24):

CHART

	ICS	*LACTC*
Cell 14 (both applicant will		
use signalling Channel 316)	Sectorized	Omni
– Voice Sets	b1, b2, b3, b4, b5, b6	B5, B6
Cell 15		
– Signalling Channel	Sectorized	Omni
– Voice Sets	314	318
	d1, d2, d3, d4, d5, d6	D3, D4, D5
Cell 16 (both applicants will	Sectorized	Omni
use signalling Channel 332)	b1, b2, b3, b4, b5, b6	B1, B3
– Voice Sets		

31. ICS will use the Anaconda-Ericsson AXE-10 central switch. Both the switch and the control point for Mobile Telephone Switching Office (MTSO) will be located at One Wilshire Boulevard, Los Angeles. At its base stations ICS will use UHF transmitting and receiving equipment manufactured by SRA Communications — a firm associated with Anaconda-Ericsson (ICS Ex. 25, p. 8; Ex. 27, p. 1; and Ex. 32).

32. At cell sites where no suitable building exists, ICS will use prefabricated equipment shelters fitted with equipment. The first year shelters will be fully equipped, wired, tested, and precabled for additional base station equipment. This will ease subsequent channel addition (ICS Ex. 37, p. 4-5).

33. LACTC will use the Motorola DYNA-T-A-C cellular radio telephone system — including the EMX-500 central switch. The central switch

and the control point will be co-located at 6101 West Centinela Ave., Culver City. LACTC's central point and base stations will be equipped with fault alarm and status indicators (LACTC Ex. 2, p. 3; Ex. 4, pp. 1-5; and Ex. 39, pp. 4-5).

34. LACTC also will employ a self-contained portable cell. That cell will be a van that will function as a 15 channel cell site. The portable cell can be driven to a base site location and provide interim service if a fixed cell fails. The portable cell can also provide temporary, localized increases in cellular system capacity (LACTC Ex. 2, p. 23; Ex. 39, p. 5).

35. Both applicants propose a grade of service (GOS) of 0.02 based on the Erlang B traffic formula.[12] LACTC's proposal is also premised on an estimated average traffic load per subscriber of 0.026 Erlangs in peak hours. However, ICS has provided no such estimate. Both will continually monitor the actual grade of service being provided on a cell-by-cell basis (ICS Ex. 30, p. 14; Ex. 37, p. 17; LACTC Ex. 2, pp. 4-5; Ex. 39, p. 17).

36. *Ability to Accommodate Anticipated Roamer Service Demand.* ICS will offer six levels of service to roamers, namely: (1) fully automatic registration with automated call for wording; (2) fully automatic registration with local manual temporary registration; (3) automatic origination, manual reception of calls; (3) wholly manual registration; (5) automatic call origination only, no reception possible; and (6) manual call origination only, no call reception possible. It has made some preliminary arrangements with other cellular system operators where there is a high traffic community of interest between systems. If nationwide roamer capability isn't possible during the first year of operation, ICS will nevertheless offer roamer service in Los Angeles during the first year (ICS Ex. 20, pp. 9-10; Ex. 26, pp. 11-15; Ex. 33, pp. 13-14 and Attachments; and ICS Ex. 37, p. 3).

37. From the outset LACTC will offer three levels of service to roamers, namely: (1) fully automatic registration with automated call forwarding; (2) revenue sharing agreements which will permit roaming subscribers to place or receive calls with operator assistance; and (3) individual arrangements between the roamer and LACTC under which the roamer will be assigned a new temporary directory number for a specified period of time (LACTC Ex. 2, pp. 18-21).

Issue B

38. As previously noted, both applicants will construct their systems during the first year and will initially install sufficient subscriber capacity to meet demand through the end of year 1; both will sectorize during the second year of operation using a four-cell frequency reuse pattern; and

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[12] A 0.02 GOS means that during the busiest hour of the day, a user has a 98% probability that his call will be either received or transmitted on the first try.

ICS will expand its system using three 120-degree sectors at each cell while LACTC will use six 60-degree sectors per cell (Paras. 28-29 *supra*). Both applicants' cell signs and shapes will be located as closely as possible to points on the idealized cell grids. This will allow for switch transitions through the growth stages of their respective systems (ICS R. Ex. 4, p. 4).

39. ICS will use a five-step method to expand its system beyond its initial omni-directional configuration: (1) it will add channels within baseline allocation; (2) it will add channels outside baseline allocation; i.e., by borrowing channels from other cells' baseline allocation; (3) it will add sites; (4) it will convert from omni-directional to sector antennas; and (5) it will split cells (ICS Ex. 37, p. 14). ICS has located its future cell sites and positioned them on the idealized cellular expansion grid. While ICS will continually monitor daily traffic for hourly blocking and for growth in traffic load against planned demand, and while it intends to use "defined expansion congestion thresholds", it never defines these thresholds in its direct case (ICS Ex. 4, p. 2; Ex. 37, Att. B).

40. ICS predicts the growth in the number of cells (both omni-directional and sectorized) and the total number of channels (ICS Ex. 5, pp. 9-11; Ex. 37, Appendix A):[13]

Table

Year	*1*	*2*	*3*	*4*	*5*
Total Number of cells	23	40	59	72	72
– Omni	23	3	3	3	3
– Sector	0	37	56	69	69
Total Number of Channels	459	1,574	2,461	3,406	4,097
– Omni	459	30	44	55	68
– Sector	0	1,544	2,417	3,351	4,029

41. LACTC will use a four-step method to expand its system: (1) it will add channels at each cell site using the specific channel assignments for each cell; (2) it will temporarily "borrow" channels from their preassigned place in the reuse pattern to meet the needs in cells that use their cells assigned channels; (3) it will convert from omni-directional to sectorized transmission; and (4) it will split cells. It too has located its future cell sites and positioned them on the idealized cellular expansion grid.

42. LACTC will also continually monitor the actual grade of service it is providing to its customers on a cell by cell basis. When the actual grade of service falls below 0.01 for any cell on 21 days of any 30 day period, LACTC will take steps to enhance its system capacity. Also, when the initial EMX-500 central switch's capacity is exceeded, LACTC will add an

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[13] There is a typographical error in ICS Ex. 37, Appendix A. See Trial Staff P.F., p. 22, n. 20. The following Table is based on the correction of that error.

additional EMX-500 module, and interconnect the data systems and trunks to enable the two switches to function as a single switch (LACTC Ex. 2, p. 4; and Ex. 39, pp. 17-19, and 23-24).

43. LACTC also predicts the growth in the number of cells (both omni-directional and sectorized) and the total number of channels (LACTC Ex. 15, p. 5, Tables 15.2-15.61).

Table

Year	*1*	*2*	*3*	*4*	*5*
Total Number of cells	24	35	41	60	60
– Omni	24	10	7	6	6
– Sector	0	25	34	54	54
Number of Voice Channels	440	1,178	1,735	2,574	3,070
– Omni	440	146	103	108	136
– Sector	0	1,032	1,632	2,466	2,934
Number of Signalling Channels	24	35	41	60	60
Total Number of Channels	464	1,213	1,776	2,634	3,130

44. As previously noted (paras. 28-30 *supra*) both applicants propose to use the same signalling channels and voice frequency sets in cells 1 through 13 and 17 through 23. However, the differences in cells 14, 15, and 16 will cause expansion plan problems for LACTC beginning in year 3. LACTC plans to sectorize cell 13 in that year, and has assigned signalling Channel 317 to that cell. But adjacent signalling Channel 318 has been assigned to cell 15, and cell 15 will remain omni-directional during years 1 through 5. LACTC's proposed 39 dBu coverage of cell 15 overlaps about one-half of cell 13, including the cell 13 base site. Similarly, the cell 13 39 dBu contour overlaps about one-half of cell 15, although it doesn't encompass the cell 15 base site. Since cellular radio channels occupy 40 kHz of spectrum space, and since adjacent channels — such as signalling channels 317 and 318 are only separated 30 kHz, LACTC will suffer adjacent signalling channel interference in substantial portions of cells 13 and 15 beginning in year 3 (LACTC Ex. 11; Ex. 15, Tables 15.14 and 15.16).

45. ICS' proposal will not suffer such adjacent channel interference. It proposes to use signalling channel 317 at cell 13, and signalling channel 314 at cell 15 during years 2 through 5 (ICS Ex. 5, p. 54, 56).

Issue C

46. *Rates, Charges, Practices, and Classifications.* ICS and LACTC will offer basic cellular service at the following monthly rates (ICS Ex. 10, pp. 8-9; Ex. 21, pp. 8-9; LACTC Ex. 20, p. 2, Attachment 20-C, p. 12; Ex. 38, p. 26):

	Rates	
	ICS	LACTC
Monthly Access Charge	$15	$10 for 1-49 units $5 for 50 or more units
Usage Per Minute		
Peak	$.25	$.17
Off-peak	$.15	$.085
Roamers		
Daily Access Charge	$5 (maximum of $20 per month)	No Specific Proposal (NSP)
Usage Surcharge	$0	NSP

47. Both applicants will offer enhanced service features through their cellular switch. The following Table sets down the rates they will charge for such features (ICS Ex. 10, pp. 9-10; LACTC Ex. 39, pp. 6-7):

	Rates			
Service Option	*ICS*	*Charge*	*LACTC*	*Charge*
Call Forwarding (Redirects incoming calls to another number)	Yes	$.25/call	Yes	No Specific Proposal (NSP)
Call Waiting (Allows first call to be put on hold to accept incoming call)	Yes	$.15/min.	Yes	NSP
Conference Calls (A 3rd party can be added to a mobile user call)	Yes	$.30/min.	Yes	NSP
No Answer Transfer (Incoming calls can be transferred to another number after a number of rings)	Yes	$.25/call	Yes	NSP
Operation Message Assist (Operator provided answering and message taking of calls)	Yes	$1.00/message	Yes	NSP
Voice Mail Box (Automated answering voice retrieval and customer announcements)	Yes	$.20/min.	Yes	NSP

Message Holding (Similar to operation message assist and voice mail box but permits holding of incoming messages)	No	Not Applicable	Yes	NSP
Roadway Monotoring Service (Access to emergency service)	Yes	0	No	Not Applicable

48. *Maintenance and Personnel.* ICS will manage its cellular system and provide integrated maintenance and repairs from a Cellular Network Management Center (CNMC), co-located with its MTSO (see para. 31 *supra*). The CNMC will control all of the system's administrative, technical, and maintenance functions. It will be staffed 24 hours a day in three eight hour shifts, with a manager and operations personnel. Two MTSO maintenance specialists, one base station specialist, one consult operator, one network analyst and a CNMC supervisor will be on duty during the two busiest shifts. During the night the staff will be reduced to one MTSO maintenance specialist and a consult operator. But supervising personnel will be on call (ICS Ex. 15, pp. 1-2; Ex. 26, pp. 10-11; Ex. 29, p. 7; and Ex. 37, p. 6).

49. MCI's existing staff in Los Angeles will also be used to manage, operate and maintain ICS's proposed system. A manager will control ICS' base site maintenance and there will be one licensed technician for each six base sites. Base sites personnel will be on call 24 hours per day, and additional personnel will be available in an emergency. Base site technicians will be stationed at Regional Customer Service Centers. Such Centers will be located within one hour travelling time from their assigned base site. Each Center will be staffed with a manager, secretary, two clerks, an air installer, and a licensed technician (ICS Ex. 15, pp. 1-3; Ex. 37, pp. 6-7).

50. ICS will periodically test and check all circuits without interfering with call processing. It will employ an RF test loop to verify whether the transmitter/receiver systems are operating correctly. MTSO maintenance during all three shifts. Radio equipment technicians will be able to measure and analyze the RF equipment's basic parameters. They'll have the necessary range of test equipment. Senior technicians will be furnished with an even more comprehensive range of test equipment, and will be able to call upon the full range of the applicant's personnel and existing facilities. ICS will maintain a full complement of recommended spare parts and modules that are needed for both preventative and corrective maintenance (ICS Ex. 27, pp. 18-20; Ex. 29, p. 6; and Ex. 37, pp. 7-9).

51. A system engineer will run LACTC's overall technical and maintenance operations. He will be supported by an RF engineer, five RF technicians, a switching engineer, and three switch technicians. The RF engineer and RF technicians will maintain and operate the cell site base

stations and associated RF equipment. Each of the five RF technicians will be located in a separate regional facility. Each regional facility will have a separate maintenance operation mobile maintenance van, and all the testing equipment and spare parts needed to maintain the system. Each facility will be able to perform remote diagnostic testing of all cell sites. Each will have at least one field service technician on call 24 hours a day, seven days a week. The switching engineer and switching technician will be stationed at LACTC's central offices. They will maintain and operate the EMX switching equipment and telephone company interface (LACTC Ex. 23A, p. 6; Ex. 39, pp. 10-13).

52. LACTC will back-up its in-house maintenance capability with a Motorola maintenance contract. Motorola will be under the duty to respond, with a one-hour notice, to service calls on a 24-hour, 7 day-week basis. Similarly, Motorola's nationwide Central Dispatch Consulting Service, located in Schaumburg, Illinois will support LACTC's EMX technician. That Consulting Service can remotely diagnose EMX problems and simulate EMX software in its central computer system. It will also assist on RF maintenance problems (LACTC Ex. 23A, p. 12; Ex. 39, p. 12).

53. LACTC will routinely check all of its system's components. It will check EMX each working day. It will conduct on-site routine cell site checks every 30 days. It will also check the frequency, modulation, and power of each voice channel regularly. LACTC will make fault alarms and statistical performance indicators available to the control point technicians.

54. LACTC's technicians will be able to monitor each channel's performance at each base site in the system from the switch location. It will also be able to automatically add or delete channels for testing. And it will maintain an in-house spare parts inventory that will cover 80% of the "critical" boards (LACTC Ex. 23A, p. 13; Ex. 39, p. 11).

Preliminary Conclusions

55. ICS/MCI/CMS (ICS) and Los Angeles Cellular Telephone Company (LACTC) each seek authority to construct and operate a new cellular system on the non-wireline block of frequencies in the Los Angeles SMS. Their applications are mutually-exclusive. Each is legally, technically, financially, and otherwise qualified.[14] and therefore entitled to comparative consideration.

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[14] The Commission has indicated that any grant to Cellular Mobile Systems of California, Inc. (now a 25% partner in ICS/MCI/CMS) must be conditioned upon the possible reexamination or reconsideration of that applicant's qualifications as a result of whatever decision is reached in *A.S.D. Answer Service, Inc. et. al.*, 47 F.R. 40230 published September 13, 1982.

Issue A Conclusions

56. Under this issue we must compare the geographic areas the applicants propose to serve, the relative demand for service in these areas, and each applicant's ability to accommodate the anticipated demand for both local and roamer service. The geographic area that an applicant proposes to serve is a major basis for comparison. See *Cellular Communications Systems,* 86 FCC 2d 469, 502 (1981).

57. *Geographic Areas and Populations.* ICS' 39 dBu contours would embrace 5,958 square miles, and 10,529,833 people; i.e., 96% of the Los Angeles SMSA. LACTC would cover 5,975 square miles and 10,572,012 people, i.e., a 96.4% of the SMSA. So LACTC will serve 17 more square miles than ICS and 42,179 more people.

58. The area and population that LACTC would serve that ICS doesn't lies in the Palos Verdes Peninsula. It includes part of San Pedro, a five-mile stretch of Highway 1 — a high traffic artery, and affluent, residential neighborhoods located in Los Angeles County's central core. Accordingly, LACTC will be awarded a very slight preference for this additional coverage.

59. *Relative Demand for Service.* Both applicants relied primarily on the Management Analysis Center Inc.'s (MAC's) market research and demand survey. Both also relied on MAC's research in formulating their first year subscriber estimates. Neither applicant will be awarded a comparative advantage under this criterion. The record shows that both presentations contain marked frailties.

60. ICS failed to establish a nexus between the MAC market research and its demand projections. Also, and since ICS doesn't rely entirely on MAC's projections, it failed to show a nexus between its estimate of potential demand and its forecast of actual demand.

61. LACTC's presentation is equally flawed. It too has failed to establish an adequate nexus between its market research and demand projections. It adopted a mathematical model to make its projections. However, the model requires the user to estimate two model parameters — the coefficients of innovation and initiation, along with an estimate of total demand when the market is saturated. LACTC's projected coefficients lack record support as does its estimated total demand at market saturation.

62. *Ability to Accommodate Local Demand.* Both ICS' and LACTC's systems can serve the anticipated first year demand at a grade of service of 0.02 Erlang B or better. Both are designed with an idealized grid structure and will avoid significant co-channel interference during the first year of operation. However, ICS hasn't provided any estimate of the average traffic load per user during peak hours. So there is no basis for the estimated demand distribution of subscribers for which it seeks

comparative credit. Accordingly, on this aspect of Issue A, LACTC will be given a slight preference.

63. *Ability to Accommodate Anticipated Roamer Service Demand.* Both applicants propose to offer a variety of services to roamers. But ICS' roamer proposal is not linked to the creation of some hypothetical nationwide registration system. In addition, and unlike LACTC, ICS has clearly established a rate structure and immediate service options for roamers, and has signified its intention to offer service to roamers at the outset of its operations. So ICS will be awarded a preference for its superior ability to accommodate anticipated roamer service demand.

64. *Summary.* Based on Conclusions 57-63 *supra.*, LACTC will be awarded a slight comparative preference over ICS. Its inconsiderable areas and population advantage when combined with the edge it has in being able to meet local demand outweighs the preference accorded ICS for its superior ability to accommodate anticipated roamer service demand.

Issue B Conclusions

65. *Expansion Plans.* Under this issue we must compare each applicant's ability to expand its system capacity in a coordinated manner within the CGSA to meet the anticipated increasing demand for local and roamer service. We will give preference to designs entailing efficient frequency use. This includes not only an analysis of the applicant's cell-splitting and additional channel plans, but also an analysis of the degree of frequency reuse the system will be capable of. We must also consider each applicant's ability to coordinate the use of channels with adjacent or nearby cellular systems. See 48 F.R. 9942 *supra.* at para. 29(b), Note 19 and 86 FCC 2d 469 *supra.* at 503.

66. ICS and LACTC propose similar expansion plans. Both will sectorize during the second year of operation using a four cell frequency reuse pattern. Their general expansion methods are virtually identical. Both will adhere to idealized grid representations, and both will continually monitor their systems to determine when expansion will be needed. ICS says that its take-action criteria will be based on defined expansion congestion thresholds. LACTC is more explicit. It says that it will act to reduce blocking and enhance system capacity when the actual grade of service exceeds 0.01 for any cell in 21 days in any 30 day period.

67. However, the record evidence demonstrates that despite the many similarities, LACTC's expansion proposal is markedly inferior to ICS's. During years 3 and beyond, LACTC's system will require significant fine-tuning before its expansion plans can be implemented. More specifically, LACTC's system will experience significant adjacent signalling channel interference in substantial portions of cells #13 and #15 starting in year 3.

68. On the other hand, ICS' general five step method will allow for coordinated system expansion. The ICS proposal demonstrates an understanding of cellular design principles, and there are no cases of potential interference. Furthermore, ICS' proposal gives the applicant a high degree of flexibility so that it can easily adapt to meet the SMSA's particular needs with a minimum of costly engineering modifications.

69. *Summary.* Based on Conclusions 65-68 *supra.*, ICS will be awarded a substantial comparative preference. It has proposed a system expansion plan which better reflects an understanding of cellular design principles and expansion principles.

Issue C Conclusions

70. Under this issue we must compare the nature and extent of each applicant's proposed service. We will compare their proposed rates, charges, maintenance, personnel, practices, classifications, regulations and facilities (including switching capabilities). However, when we've completed those comparisons we'll attach less significance to them than we do to Conclusions A and B *supra.* See 86 FCC 2d 469 *supra.*, at 503.

71. *Rates, Charges, Practices and Classifications.* Both applicants have developed usage sensitive rates that combine access charges with incremental charges for air time; both provide for time of day (peak-off peak) pricing; and both set forth the degree to which they offer service on an unbundled basis. LACTC will offer lower rates for such service. See Findings 46 *supra.* But it will only be given a slight preference for its lower rate levels.[15]

72. However, ICS' rate proposal is clearly superior in two respects. First of all, it is more detailed regarding the charges it will make for the enhanced service features it offers. See Finding 47 *supra.* And secondly, ICS has detailed its roamer service charges. Specifically, ICS will offer roamer service at $5 a day with a $20 maximum charge per month and no surcharge for usage. See Finding 46 *supra.* LACTC's pro-forma tariff makes no provision for either roamer service or enhanced features. So it is concluded that ICS' charges will encourage more efficient use of the cellular system than will LACTC's.

73. *Maintenance, Personnel, and Facilities.* Both applicants have made adequate maintenance and personnel proposals. Both propose technically acceptable facilities and theoretically viable maintenance plans. Both can provide high quality cellular service. Neither has shown a superiority worthy of a comparative preference.

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[15] The Presiding Officer has adopted the Separated Trial Staff's contention that, for comparative purposes, the proposed rate *structures* are more worthy of consideration than the proposed rate *levels.* See *Separated Trial Staff's Proposed Findings of Fact and Conclusions of Law* at page 35, paragraph 59.

74. *Summary.* ICS' superior detailed rate structure is entitled to a substantial comparative preference over LACTC's more limited and narrowly framed rate level advantage.

Ultimate Conclusion

75. LACTC has garnered a slight comparative advantage under Issue A for its minimal areas and population advantage when combined with its ability to meet local demand. This outweighs ICS' superior ability to accommodate roamer service demand.

76. ICS has been awarded a substantial comparative preference under Issue B for its superior system expansion proposal, and a substantial preference under less significant Issue C for its more detailed and efficient rate structure.

77. On balance it must be concluded that ICS is clearly comparatively superior to LACTC, that ICS will bring the best practicable cellular service on frequency Block A to the Los Angeles, California SMSA; and that granting the ICS application would best serve the public interest, convenience and necessity.

SO, unless an appeal is taken from this Initial Decision or the Commission reviews it on its own Motion, ICS/MCI/CMS' application (File No. 26109-CL-P-(23)-82) IS GRANTED, and Los Angeles Cellular Telephone Company's application (File No. 26083-CL-P-(24)-82) IS DENIED;[16]

The grant to ICS/MCI/CMS is conditioned upon its obtaining the appropriate antenna structure clearances;

The grant to ICS/MCI/CMS is conditioned on whatever action the Commission may consider necessary on CMS' qualifications to be a Commission licensee after a decision in *A.S.D. Answer Service, Inc. et. al.*, FCC 82-391, released August 4, 1982;

The Motion to Reopen the Record for the Purpose of Adding a Condition to Grant of Application that was filed on November 4, 1983, IS GRANTED in part and IS DENIED in part;[17] and

The grant to ICS/MCI/CMS is conditioned on whatever action the Commission may consider on CMS' qualifications to be a Commission licensee after a decision in *Cellular Mobile Systems of Texas, Inc. et. al.*, CC Docket No. 83-660 (the Houston Cellular proceeding).

FEDERAL COMMUNICATIONS COMMISSION

WALTER C. MILLER, *Administrative Law Judge*

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[16] If exceptions aren't filed within 30 days, or the Commission doesn't review the case on its own motion, this Initial Decision will become effective 50 days after its public release. See 47 CFR 1.276(d).

[17] It isn't necessary to reopen the record to condition the grant made today. However, the request for a condition will be granted since CMS is a principal in the ICS/MCI/CMS winning application.

Common Carrier
International Satellite Systems

Commission issued a *Report and Order* regarding the establishment of satellite systems which would provide international communications services and *Memoranda Opinions, Orders and Authorizations* of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issued *Memoranda Opinions and Orders* regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.

—*International Communications*
CC Docket No. 84-1299

FCC 85-399

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	
Establishment of Satellite Systems Providing International Communications	CC Docket No. 84-1299

REPORT AND ORDER

Adopted: July 25, 1985; Released: September 3, 1985

BY THE COMMISSION: COMMISSIONER QUELLO CONCURRING AND ISSUING A SEPARATE STATEMENT; COMMISSIONER RIVERA ISSUING A SEPARATE STATEMENT.

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II. Introduction

1. On January 4, 1985, we initiated an inquiry and rulemaking about the construction and operation of satellite systems providing international communication services.[1] The purpose of this proceeding was to solicit data and analyses about issues that have arisen in connection with the filing of a series of applications for authority to establish international communications satellite systems separate from INTELSAT and to obtain comments on the recent Executive branch decision that such systems are "required in the national interest" subject to certain limitations.

2. Applications were filed by the Orion Satellite Corporation ("Orion"), File No. CSS-83-002-P, on March 11, 1983; by International Satellite, Inc. ("ISI"), File Nos. CSS-83-004-P(LA), I-P-C-83-073, on August 12, 1983; by RCA American Communications, Inc. ("RCA"), File No. I-T-C-84-085, on February 13, 1984; by Cygnus Satellite Corporation ("Cygnus"), File No. CSS-84-002-P(LA), on March 7, 1984; and by Pan American Satellite

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[1] 50 Fed. Reg. 1570 (1985). Comments were originally due on February 14, 1985. By *Order*, 50 Fed. Reg. 4711 (1985), the Chief Common Carrier Bureau, extended the deadline for comments to April 1, 1985 and reply comments to June 5, 1985.

Corporation ("PanAmSat"), File No. CSS-84-004-P(LA), on May 31, 1984.[2] After the initiation of this proceeding, Financial Satellite Corporation ("FINANSAT"), File No. CSS-85-004-P(LA), filed an application on May 7, 1985.

3. In our Notice of Inquiry and Proposed Rulemaking, we asked for comments on the potential public benefits of authorizing separate systems, and on the economic impact separate systems would have on INTELSAT and their effect on consumers, service providers and equipment manufacturers. In addition, we requested comments on legal, technical and other policy issues and on those U.S. international obligations that must be taken into account in considering the applications before us. Finally, we requested comments on the scope and applicability of the Executive branch service restrictions intended to avoid significant economic harm to INTELSAT.

III. Summary

4. In this proceeding, we establish regulatory policies to consider applications for satellite systems providing international communications services separate from INTELSAT. We find here that the authorization of these separate satellite systems according to the Executive branch restrictions will be in the public interest. In arriving at this determination, we consider, first, the potential public benefits alternative satellites may introduce in the international marketplace. In that section, we look at the current structure of both the domestic and international satellite markets and determine whether the competitive benefits claimed in the proposals for these systems would be a likely result of their entry. Next, we consider the scope, applicability, and enforceability of the Executive Branch restrictions designed to avoid causing significant economic harm to the INTELSAT system. In that area, we address the definition of public-switched network and whether the sale or long term lease restriction will effect the services the satellite operators will be able to offer. Third, we look at the concept of significant economic harm in Article

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[2] Systematics General Corporation filed two applications to construct, launch, and operate satellite systems providing international services (File Nos. CSS-84-005-P(LA), CSS-84-006-P(LA)) on June 12, 1984. On July 27, 1984, Systematics filed a motion to withdraw both applications. Under delegated authority, the Commission dismissed the applications without prejudice by letter dated August 6, 1984 pursuant to § 1.748(a) of the Commission's Rules and Regulations, 47 C.F.R. § 1.748(a) (1984). In addition, Western Union Telegraph Co. requested, and was granted, a waiver to spend additional money to modify its previously authorized WESTAR VI-S domestic satellite (File No. 1144-DSS-P/LA-84) to allow six transponders to provide coverage of Central and South America. Letter from Chief, Domestic Facilities Division, Common Carrier Bureau, to Robert N. Green, Associate Counsel, Western Union Telegraph Company (July 20, 1984). It has an application on file, File Nos. 1144-DSS-P/LA-84; I-T-C-85-039, which is currently being considered by the Commission.

XIV(d) of the INTELSAT Agreement and the potential impact of the entry of separate satellite systems into a limited segment of the international communications market on INTELSAT. Fourth, we consider a number of related issues which were raised in the record and could effect the authorization of these systems. Finally, we consider the necessary legal, technical, and financial qualifications to be a satellite systems operator.

5. We find that the separate satellite systems will provide substantial benefits to the users of international communications services without causing significant economic harm to INTELSAT. We also find it necessary to impose the Executive branch restrictions on the authorization of these systems in order to meet our international obligations under the INTELSAT Agreement. As to the scope and applicability of the Executive Branch restrictions, we find that: 1) no communications provided over the separate systems may interconnect with the public-switched network either directly or indirectly; 2) there will be no minimum unit of capacity; 3) there will be a one-year minimum lease period; 4) separate systems operators are not to operate as common carriers; 5) the "no-interconnect" restrictions and one-year long-term lease requirement will apply to all levels of users of separate system facilities; 6) common carriers and enhanced service providers may resell separate satellite capacity consistent with the restrictions; and 7) the use of separate systems by United States carriers would require authorization under Section 214 of the Communications Act of 1934. We also find that because of inherent detectability and disincentives and our commitment to take forceful remedial action, the restrictions would be enforceable. In addition, we conclude that the entry of these systems in a limited area of the international market will not cause significant economic harm to INTELSAT. INTELSAT will remain the exclusive provider of satellite facilities for public-switched message services and already has a start in providing the services which the separate satellite systems would compete. INTELSAT may lose a small part of its business in this market to new entrants, but we conclude that growing demand for satellite services will more than compensate for a smaller market share. We also conclude that none of the related issues raised will preclude or delay the authorization of these systems. Finally, in this order, we set out the specific details of the legal, financial, and technical qualifications necessary to obtain authority to construct and operate separate satellite systems.

III. Background

A. The Applications

6. Orion's proposed system would consist of two in-orbit satellites and one ground spare, with each satellite having 22 transponders providing 36 MHz of useable bandwidth per transponder. The satellites' signals would cover the eastern portion of North America and the western portion of Europe and would transmit and receive in the 11/14 GHz frequency bands. The proposed satellites would be designed to provide video, data, and audio services using digital and analog modulation techniques. The video services would consist of both full-frame, full-speed video for television programming, and compressed, teleconferencing capabilities. Each satellite's capacity would exceed the equivalent of 20,000 voice-grade half-circuits, 22 full rate video signals, or 1.4 Gbps of data signals. Orion states in its application that it would not operate as a common carrier because it would sell or lease transponder capacity on a non-tariffed basis to users on either side of the Atlantic.

7. ISI's proposed system would consist of two in-orbit satellites and one ground spare, with each satellite having 32 receive and transmit channels (over 32 transponders) providing 54 MHz of useable bandwidth per channel. The satellites' signals would cover the contiguous 48 United States (CONUS) and the western portion of Europe as far as the Adriatic Sea. The proposed system would transmit and receive in the 11-12/14 GHz frequency bands. The satellites would be designed to provide video, audio, and data services using both digital and analog modulation techniques. The video services would consist of both high-speed and slow-scan video teleconferencing and, along with the audio services, would encompass every kind of television and radio programming currently available in the United States and Europe. The data services would include TWX/telex, newswires, facsimile, and electronic mail. ISI states in its application that it would use a portion of its capacity to provide services on a tariffed common carrier basis. ISI would sell or lease the remainder of its capacity in the same manner as that proposed by Orion.

8. Cygnus' proposed system would consist of two in-orbit satellites and one ground spare, with each satellite having 16 transponders providing 54 MHz of useable bandwidth per transponder. The satellites' signals would cover CONUS and the western portion of Europe. The system also would have a spot beam which would provide service to Puerto Rico, the U.S. Virgin Islands, the Caribbean Basin, and portions of Central America. The system would operate in the 11-12/14 GHz frequency bands and be able to operate with a variety of earth stations including the inexpensive "micro" earth stations (e.g., roof-top antennas) as well as the larger "mini" and "main" earth stations. The satellites would be designed to provide digital communications services including

video teleconferencing, high-speed facsimile, computer-to-computer communications, remote printing, teletext, videotext, and data collection and distribution services. Cygnus states in its application that it would offer all of its transmission capacity on a non-common carrier basis through long-term leases or transponder sales.

9. PanAmSat's proposed system would consist of one operational satellite and one in-orbit spare. Twelve of the satellite's 36 transponders would be used for international traffic between North and South America. The remaining 24 would be used for domestic service in South America. The twelve international transponders would have 72 MHz of useable bandwidth per transponder and would be used to provide links between New York, Miami, the South American continent, and parts of Central America, the Caribbean, and the Iberian pennisula. The system would uplink at 6.4-6.9 and downlink at 10.7-11.2 GHz. The satellite would be designed to provide video and audio distribution services, specifically, distribution of television and radio programs from entities such as television networks, motion picture studios, cable systems, and news and wire services. PanAmSat proposes in its application to offer its transponder capacity on a non-common carrier basis for sale or long-term lease to both U.S. and foreign customers.

10. RCA's proposed system would consist of six transponders on its previously authorized SATCOM VI domestic satellite.[3] The satellite would operate in the 4/6 GHz frequency band and have 36 MHz of useable bandwidth per transponder capable of covering CONUS and portions of Europe and Africa. The six transponders would be available for either domestic or international service because the satellite would be equipped with transfer components capable of switching the transponders' service areas to accommodate either service. The transponders would be used for video distribution, teleconferencing, private leased voice, and low-speed and medium-speed data communications. RCA states in its application that it would provide its services on a tariffed, common carrier basis, but it also states it would make whole transponders available for customers with high capacity needs.

11. FINANSAT's proposed system would consist of two in-orbit satellites and one ground spare. One satellite would operate in the Atlantic Ocean Region and the other in the Pacific Ocean Region, with each satellite having 24 transponders providing 36 MHz of useable bandwidth per transponder. FINANSAT proposes to link internationally its networks between the Atlantic and Pacific regions and provide full dual-region satellite system interconnectivity. FINANSAT's Atlantic satellite will have separate beam coverage of the contiguous United States (CONUS), Western Europe and South America, and FINANSAT's

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[3] RCA American Communications, Inc., Mimeo No. 33200, released August 4, 1983.

Pacific satellite will have three separate beams covering the Western United States, the Far East and Australia. Both satellites will operate in uplink frequencies of 5.925 to 6.425 GHz and downlink frequencies of 3.7 to 4.2 GHz. FINANSAT proposes to offer its transponders for sale or long-term lease to major financial and other business institutions exclusively on a private, non-common carrier basis. FINANSAT's primary service capability will be a point-to-point data distribution and interactive data transmission through small, low-cost earth stations to be located on customer premises.

B. The Presidential Determination and Executive Branch White Paper

12. On April 6, 1983, shortly after the Orion application was filed, the Department of State and the Department of Commerce sent a joint letter to the Commission requesting that the Commission refrain from taking any final action on the application until such time as an Executive branch group could review and study the application's impact on the national interest and foreign policy of the United States.[4] On August 26, 1983, following the filing of ISI's application, the Department of Commerce sent a letter to the Commission which again requested that the Commission not take any final action on the applications.[5] The letter stated that the filing of a second application for international satellite services raised new considerations which would have to be included in the Executive branch analysis.

13. On November 28, 1984, President Reagan signed a Presidential determination (PD No. 85-2) that alternative satellite systems were "required in the national interest" within the meaning of Sections 102(d) and 201(a) of the Communications Satellite Act. The President's determination states that the United States shall consult with INTELSAT regarding such systems "as are authorized by the Federal Communications Commission." On the same date, at the direction of the President, the Department of State and Department of Commerce jointly informed the Commission of the President's decision and the criteria necessary to ensure United States fulfillment of its international obligations as well as furtherance of its telecommunications and foreign policy interests.[6] The

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[4] Letter from David J. Markey, Assistant Secretary for Communications and Information, Department of Commerce and Diana Lady Dougan, Coordinator, International Communications and Information Policy, Department of State to Mark S. Fowler, Chairman, Federal Communications Commission (April 6, 1983).

[5] Letter from David J. Markey, Assistant Secretary for Communications and Information, Department of Commerce to Mark S. Fowler, Chairman, Federal Communications Commission (August 26, 1983).

[6] Letter from George P. Shultz, Secretary of State, and Malcolm Baldridge, Secretary of Commerce, to Mark S. Fowler, Chairman, Federal Communications Commission (November 28, 1984).

joint letter states that two restrictions must be imposed on the alternative systems prior to final authorization by the Commission:

> (1) each system is to be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public-switched message networks (except for emergency restoration service); and,
>
> (2) one or more foreign authorities are to authorize use of each system and enter into consultation procedures with the United States Party under Article XIV(d) of the Intelsat Agreement to ensure technical compatibility and to avoid significant economic harm.

14. In addition, two letters were exchanged between Secretary of Commerce Malcolm Baldridge and Secretary of State George Schultz regarding two related issues to the President's determination on new international satellite systems.[7] The letters stated that the Executive branch should clarify its positions on: 1) INTELSAT's ability to price flexible when confronted with actual or potential competition, and 2) direct cost-based access to the INTELSAT space segment by users and carriers in addition to Comsat.

15. On February 8, 1985, the Department of State and the Department of Commerce jointly submitted a paper to the Commission stating the policy grounds for the President's determination and reviewing related issues. The paper, entitled, "A White Paper on New International Satellite Systems," (hereinafter referred to as the "White Paper") was completed by the Senior Interagency Group on International Communication and Information Policy. The White Paper was placed in the record for this proceeding.[8]

16. The White Paper reviews current U.S. telecommunications policies and international obligations to determine whether and under what conditions authorizing satellite systems and services in addition to the INTELSAT system would be: (1) consistent with prevailing U.S. law, practice, and international treaty obligations; (2) compatible with sound foreign policy and telecommunications policy goals; and (3) in the U.S. national interest. The White Paper generally concludes that:

> It is technically feasible, economically desirable, and in the national interest to allow new entry by U.S. firms into the international satellite field. Customers should be afforded both the new service options and the benefits of competition among customized service providers that new entry promises. This can be accomplished, moreover, while maintaining the technical integrity of the INTELSAT global system and avoiding significant economic harm to that system. U.S. foreign policy, and international communications and information policy, require a continued strong

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[7] *See* letter from Malcolm Baldridge, Secretary of Commerce, to George P. Schultz, Secretary of State (November 30, 1984); and letter from George P. Schultz, Secretary of State, to Malcolm Baldridge, Secretary of Commerce (December 20, 1984).

[8] The addition of the White Paper to CC Docket No. 84-1299 was placed on public notice, Report No. I-4032, on February 11, 1985.

> national commitment to INTELSAT as "a single global commercial telecommunications satellite system as part of an improved global telecommunications network." But our national commitment to INTELSAT and other important goals can be accommodated, provided that new international satellite systems and services are authorized and regulated along the lines discussed in this report.

17. The White Paper specifically concludes that additional satellite systems should be authorized by the Commission but limited to providing only "customized" services as defined in the White Paper. In addition, it concludes that the Commission should reexamine the issue of allowing U.S. carriers and end users cost-based access to INTELSAT space segment for customized services. Finally, it emphasizes that the United States should and will continue to maintain its full commitment to INTELSAT.

18. In arriving at these conclusions, the Senior Interagency group looked at several factors of the international telecommunications industry. The group noted the tremendous growth in the telecommunications industry, the diversity of services available in the industry, the industry's contribution to promoting international trade in general, and its specific contribution to U.S. trade. The White Paper states that there currently is competition between the submarine cable facilities and satellite facilities, which the Senior Interagency group believes will increase with the introduction of fiber optic cables and with a possible change in the "balanced loading" rules. It also states that there are planned regional satellite systems for the Middle East and Africa and certain European domestic satellite systems which would have "footprints" that would cover much of the eastern half of the United States and Canada and, thus, would be capable of providing transatlantic service.

19. The White Paper discusses U.S. foreign policy regarding international communications satellite systems,[9] reviews the background of INTELSAT and discusses the U.S. role as the primary force behind the development of that organization. It states that providing communication service to developing countries was a significant goal of the establishment of a global system and that, from the outset, INTELSAT has charged uniform rates for identical services provided on a global basis. The White Paper recognizes that some countries are concerned that the introduction of separate systems in the North Atlantic would lead to an increase in worldwide rates, but concludes that placing conditions restricting the operation of separate systems would avoid significant economic harm to

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[9] Among the foreign policy considerations addressed in the White Paper is the effect of the authorization of these systems on the use and desirability of the Intersputnik satellite system. The White Paper states that, while increasing use of Intersputnik and Soviet influence in international communications would continue to be an area of concern under any circumstances, increased Soviet influence would be an unlikely result of a U.S. decision to authorize separate systems.

INTELSAT. Thus, if the separate systems only are authorized under regulatory terms and conditions that restrict them to the "customized service" market, the White Paper concludes that an adverse impact on INTELSAT is unlikely. Since the new satellite systems would not be able to provide public-switched services, INTELSAT would retain its "commercial core" of revenues and would not be harmed. The White Paper further concludes that there would be little possibility of adverse economic harm to developing nations which are concerned that the entrance of satellite systems would divert substantial amounts of traffic from profitable routes and result in increases in communication costs. It reaches this conclusion because: 1) the entrants would be unable to compete with a majority of INTELSAT's service offerings; 2) even with significant cross-elasticities between the conventional and customized markets, both markets are growing rapidly and revenue siphoning would not occur; and 3) INTELSAT is in a good position to compete for the customized services market.

20. As to the future role of the United States in INTELSAT, the White Paper states that the United States has been and will continue to be a strong leader and contributor to the INTELSAT system. It emphasizes the need to respond to changing needs in international communications and states that the Satellite Act and the INTELSAT charter permit such response. It concludes that the Executive branch approach would balance the need to avoid significant economic harm to INTELSAT with recognition and movement toward satisfying changing international communications needs.

21. Finally, the White Paper also finds that the introduction of the satellite systems will not adversely affect the procurement of satellite equipment from U.S.-based companies. Rather, it concludes that there should be positive trade effects because of the increase in the number of satellites. It states that the satellite equipment industry has been becoming more competitive each year with more U.S. and foreign owned companies entering the market and that this trend will continue whether or not these new systems enter the international communications market.

V. *Comments*

22. We received 32 comments and 18 reply comments in response to our Notice. In addition, we received a large number of informal comments which have been made part of the record in this proceeding, including letters of concern from INTELSAT signatories, members of Congress and other parties. We will state the basic position of these parties and, as necessary, further describe their positions in our discussion of the issues in this proceeding.

A. *Formal Comments*

23. Five applicants, Orion, ISI, Cygnus, RCA Americom and PanAmSat, filed comments supporting the authorization of the separate satellite systems, subject to the restrictions set forth by the Executive branch. Four of the applicants argue that the Commission is bound by the Presidential determination, does not need to re-examine the policy issues already decided by the Executive branch, and should immediately proceed to act on the applications to determine if they meet the requirements of the Communications Act of 1934.

24. The following common carriers and/or domestic resellers filed comments: American Telephone and Telegraph Co. (AT&T); Communications Satellite Corporation (Comsat); International Relay, Inc. (IRI); Hawaiian Telephone Company (HTC); ITT World Communications, Inc. (ITT); Satellite Business Systems (SBS); Equatorial Communications Services (Equatorial); American Satellite Co. (ASC); Wold Communications, Inc. (Wold); Fedex International Transmission Corp. (Fedex); MCI International, Inc. (MCII); and Ethereum Scientific Corp. (Ethereum).

25. SBS, ASC, Wold, and Ethereum support the authorization of the separate satellite systems under the limitations set forth by the Executive branch. AT&T, however, contends that the restrictions would be ineffective and that the satellite systems should be authorized without any limitations, thus allowing open competition with INTELSAT. Comsat maintains that any separate system the Commission may authorize must be restricted according to the limitations articulated by the Executive branch, but the Commission also must impose additional restrictions to protect INTELSAT. IRI joins Comsat in calling for additional restrictions to protect INTELSAT. ITT, Equatorial, MCII, and Fedex take no position on the authorization of the separate satellite systems but argue for carrier direct cost-leased access in INTELSAT.

26. In addition to the carriers, Turner Broadcasting System, Inc. (TBS), and ESPN, Inc. (ESPN), both of which provide video programming to cable systems and own and operate domestic earth stations, filed comments supporting the authorization of the satellite systems. Home Box Office, Inc. (HBO), Gannett Co., Inc. (Gannett), and American Broadcasting Companies, Inc. (ABC), CBS, Inc. (CBS), and National Broadcasting Company, Inc. (NBC), jointly, filed comments supporting separate systems as an alternative source of facilities for international television transmission and other services.

27. Two U.S. government agencies filed comments supporting the authorization of separate systems. Three bureaus of the Federal Trade Commission, the Bureaus of Competition, of Economics, and of Consumer Protection, advocate authorization of the satellite systems without restrictions. The Department of Justice supports the authorization of separate

systems consistent with the public interest standard of the Communications Act and in accordance with the Presidential determination.

28. Hughes Aircraft Co. (Hughes), the largest manufacturer of commercial communications satellites in the world, supplied information on the revenues and total contract values of the commercial communications market. Hughes does not take a position on the authorization of separate satellite systems stating that its principal interest lies in promoting the use of satellite technologies in whatever manner they can serve the public interest. Hughes concludes that the proposed separate systems will result in some lessening of technological stimulation, because the satellites will be constrained to off-the-shelf technology; and, INTELSAT itself will have less ability to invest in new technology if its traffic is diverted to the proposed systems.

29. Comments were also filed by the Ad Hoc Telecommunications Users Committee (Ad Hoc Committee), the Computer and Business Equipment Manufacturers Association (CBEMA), the Central Committee on Telecommunications of the American Petroleum Institute (API), and jointly by the National Black Media Coalition, TransAfrica, and the American Committee on Africa (collectively, African Interest Organizations or AIOs). The Ad Hoc Committee, CBEMA, and API represent end users of international transmission services and state their support for the separate satellite systems. The AIOs, on the other hand, contend that the separate system applications should be denied because the entry of these systems would require African states to pay higher costs for telecommunications services. One foreign entity, Technova, Inc. (Technova) a Japanese technical and economic research organization, submitted comments which supported the authorization of the separate satellite systems.

30. Finally, several individual parties submitted comments. Former Ambassador and Commissioner Abbott Washburn states that he believes that the authorization of these systems would not be in the public interest. However, should the Commission decide to proceed with these systems, Amb. Washburn states that it must take every precaution to ensure INTELSAT will be protected. Walter Hinchman Associates, Inc., communications consultants, filed economic studies, originally commissioned by INTELSAT, which defined significant economic harm and found that the alternative systems would cause significant economic harm to INTELSAT. Arthur L. Levine, a Professor of Public Administration at Baruch College in New York, states that the Commission should consider a number of issues most carefully in a broad forum, in particular the impact of authorizing private systems on the telecommunications needs of developing countries, before authorization of such systems. Jefferson C. Glassie, a student at the National Law Center, George Washington

University submitted his publication entitled "Analysis of the Legal Authority for Establishment of Private International Communications Satellite Systems," which concludes that the Commission has authority to authorize private satellite systems, but, if the Commission decides to proceed with the systems, it should do so only under a structured plan which ensures that the INTELSAT system would not be harmed.

31. The Commission received reply comments from: Amb. Abbott Washburn;[10] ABC, CBS, NBC; Ad Hoc Committee; AT&T; Comsat; Equatorial; Fedex; Financial Satellite Corporation; Home Box Office; IRI; ISI; National Black Media Coalition; National Telecommunications and Information Administration (NTIA); Orion; PanAmSat; RCA; Systematics General Corporation; and United Satellite Action. Those parties filing reply comments that previously filed initial comments in this proceeding generally reiterate their basic positions in addition to responding to certain specific comments filed by other parties. Among those parties which filed replies but did not file initial comments, Financial Satellite Corporation states that it agreed with many of the initial comments filed in support of separate satellite systems and mentioned further that it is inappropriate to conclude that the implementation of its proposed service would cause significant economic harm to INTELSAT. Systematics General Corporation (SGC), which supports the President's determination that separate satellite systems are "required in the national interest," urges the Commission to recognize the legal nexus between domestic and international satellite authorization proceedings. SGC also requests that the Commission, in preparing for WARC-ORB(1) vigilantly protect U.S. national rights to international orbital locations. United Satellite Action (United) states that the approval of private international satellite systems would strengthen the market for communications satellite equipment.

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[10] Abbott Washburn also filed a Petition for Leave to File Additional Comments on July 11, 1985. In the petition, Amb. Washburn requests that the Commission accept his additional comments addressing the Reply Comments of IRI and states that his comments present no new issues or evidence and therefore will cause no prejudice to any other interested party. In the additional comments, Amb. Washburn wishes to associate himself with the legal and legislative history analysis put forth in IRI's Appendix to its Replay Comments which argues that ultimately only Congress has the authority to allow private, commercial satellite systems. Amb. Washburn also encloses a summary of IRI's Appendix. In response to Amb. Washburn's petition, ISI filed an Opposition to Petition for Leave to File Additional Comments on July 22, 1985. We agree with ISI's argument that Abbott Washburn fails to show with particularity the facts and circumstances which warrant accepting his additional comments under Section 1.3 of the Commission's rules and regulations. 47 C.F.R. § 1.3 (1984). Given the extension of time granted in this docket and the facts that his comments do not raise new issues or evidence, and that his ability to comment in this proceeding was not compromised, we will not grant Amb. Washburn's petition. Moreover, granting his petition would require an opportunity for other parties to respond which would add unnecessary delay to this proceeding.

United also argues that allowing direct access to the INTELSAT space segment would improve INTELSAT's competitive posture in the international communications marketplace. Finally, NTIA strongly supports the licensing of separate systems. NTIA argues that public benefits would accrue to users of specialized services if separate systems are licensed and enter the market. It further contends that the proposed Executive branch service restrictions are enforceable and also are both necessary and sufficient to protect INTELSAT.

B. Informal Comments

32. Several members of Congress submitted letters and materials to the Commission which were included in the record for this proceeding. Letters and materials were submitted by Representatives Jim Bates, Tony Coelho, John D. Dingell, Julian C. Dixon, Dan Fuqua, Steny H. Hoyer, Sander M. Levin, Buddy Mackay, Daniel A. Mica and the Committee on Foreign Affairs, Al Swift, and Alan Wheat jointly with the Congressional Black Caucus; and by Senators Max Baucus, Alan Cranston, Thomas F. Eagleton, John Glenn, Barry Goldwater, Spark M. Matsunaga, and Claiborne Pell. Materials enclosed with the letters primarily consist of copies of INTELSAT internal documents addressing the issue of separate satellite systems. Although Comsat already has provided these documents to the Commission for Commission use in oversight of Comsat's involvement in INTELSAT, and although most of the documents already are available to the public at the Commission, we have placed them in the record. However, some of the documents do not carry the normal INTELSAT identification markings that appear on those provided to U.S. government agencies. Thus, to the extent there may be inconsistencies with the official documents that we receive, we are relying on the official documents.

33. In addition, we have received a series of letters from signatories to INTELSAT and from a few foreign embassies stating their concern about the possible impact separate systems might have on INTELSAT. These letters also have been included in the record.[11] Generally, they claim that the competing systems propose to concentrate their services in the high traffic routes in the North Atlantic basin and, in effect, receive high earnings while meeting the requirements of a small number of large users. For INTELSAT, it is argued, this would result in the loss of large traffic trunks and would significantly reduce the revenues available to meet its capital investment requirements and hold down rates throughout the world. Such a change in U.S. policy would negatively impact all users of INTELSAT, in particular, the people in small and developing countries.

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[11] We also have received letters from signatories in response to specific separate system applications. These letters have been placed in the appropriate application file.

Also expressed is the concern that United States approval of any of the pending applications would lead to a proliferation of other U.S. satellite systems intending to carry public international telecommunications traffic in direct competition with INTELSAT which, in turn, would encourage other INTELSAT members to make similar authorizations.

34. Finally, we have received correspondences from other interested parties. Meheroo Jussawalla, a Research Associate/Economist with the Center for Cultural and Technical Interchange Between East and West, Inc., states that the introduction of private international satellite systems to operate in the Atlantic region may threaten cost-effective service to developing nations in the Asia-Pacific region, particularly with respect to their thin route traffic.[12] Ms. Jussawalla adds that INTELSAT will receive a sufficient competitive challenge from undersea cables. Harrison H. Schmitt, a consultant specializing in the commercialization of space and a former U.S. Senator, extolled INTELSAT and warns against adopting a policy which does not adequately protect the vital foreign affairs, national defense and commercial interests served by INTELSAT.[13] Finally, Joseph M. Trevino, National Executive Director of the League of United Latin American Citizens, suggests that any separate satellite system which is licensed must be limited in scope, cause no economic harm to INTELSAT and complement INTELSAT.[14] Mr. Trevino also suggests that the conditions and limitations placed on such a system be clearly defined and enforceable.

VI. Discussion

35. The applications that have been filed with the Commission pose a fundamental policy question to the United States: should the United States continue to rely almost exclusively on INTELSAT for its future international satellite communications needs or should it seek alternatives to satisfy some of those needs if it can avoid significant economic harm to INTELSAT. This question requires consideration of foreign policy, international trade and national security as well as telecommunications matters. As described above, the President has reviewed the proposals under the national interest standard of the Communications Satellite Act of 1962 and has made the generic policy determination that separate satellite systems are required in the national interest subject to certain limitations. The task before the Commission is to establish a policy for regulatory consideration of the applications and to determine whether any

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[12] Letter from Meheroo Jussawalla to William J. Tricarico, Secretary, Federal Communications Commission (received February 13, 1985).

[13] Letter from Harrison H. Schmitt to Mark S. Fowler, Chairman, Federal Communications Commission (received February 11, 1985).

[14] Letter from Joseph M. Trevino to Mark S. Fowler, Chairman, Federal Communications Commission (received May 24, 1985).

of the proposed systems should be licensed under the public interest standard of the Communications Act of 1934 consistent with the Presidential determination.[15]

36. After consideration of the record in this proceeding and the records established in response to the applications, we conclude that the establishment of separate satellite systems will result in substantial benefits to users of international satellite communications services. Separate systems will provide users with special communications needs with currently unavailable means of packaging and transmitting information over satellite networks. In addition, separate systems will stimulate technological innovation and service development, improve network efficiencies, reduce user-costs, create new business and trade opportunities. We further conclude that we can authorize separate systems subject to the Presidential limitations as further developed in this order with the reasonable assurance that INTELSAT will not incur significant economic harm. In separate orders adopted today, we are conditionally granting three of the applications that have been filed with the Commission and issuing construction permits. Each authorization is conditioned on one or more foreign authorities authorizing the use of the proposed system and entering into consultation procedures with the United States under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm. We will not issue licenses permitting the proposed systems to be launched or begin operating until we have been informed by the Department of State that the United States has fulfilled its international obligations. With respect to the other two applications, we have found that the proposals do not comply with certain provisions of the international Radio Regulations, and we are therefore giving the applicants thirty days to modify their applications to bring them into compliance. Upon satisfactory modifications, we will issue construction permits with the same condition.

37. In reaching these decisions, we emphasize, as has the Executive branch on several occasions, the continuing commitment of the United States to the INTELSAT Agreement and the obligations it entails. The

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[15] We find no basis for IRI's contention that Congress intended any systems authorized pursuant to Section 102(d) of the Communication Satellite Act of 1962 to be government-owned satellite systems. In an appendix to its Reply Comments, IRI claims that the legislative history of the Satellite Act demonstrates that Congress did not delegate power to the Executive Branch or the Commission to license private, commercial satellite systems but that Congress contemplated only the authorization of government owned satellite systems under the national interest standard of Section 102(d) and 201(a)(6) of the Satellite Act. We do not find this to be the case but conclude that we have broad authority under the Communications Act of 1934 to authorize private commercial international satellite systems based on a Presidential determination that such satellite systems are "required in the national interest."

United States is not acting unilaterally nor without consideration of the concerns of other nations. In all respects, the United States will conduct consultations consistent with the INTELSAT Agreement. The United States views its commitment to INTELSAT as an integral part of its desire to continue development of an improved global telecommunications network. This policy is embodied in the Communications Satellite Act of 1962. While we view INTELSAT as an essential core for the provision of international public telecommunications services to all areas of the world, INTELSAT now operates in a dynamic environment driven by changing technology, competitive economics and diversifying user needs. We believe that new approaches in the provision of satellite services will give users increasing diversity and flexibility, and will be consistent with the mandate of the 1962 Satellite Act by reflecting the benefits of satellite technology "in both quality of services and charges for such services." 47 U.S.C. 702(b).

38. We also emphasize several additional points. First, the United States is not the first INTELSAT member to consider the use of non-INTELSAT space segment to meet its international public telecommunications needs. Systems separate from INTELSAT have already been established by other nations, and new ones are planned. A growing number of nations, developing as well as developed, are using, or are considering use of, separate systems to complement INTELSAT in providing their international telecommunications needs. INTELSAT has favorably coordinated several systems under Article XIV(d) finding no significant economic harm. It has yet to reach an unfavorable recommendation for any proposed system. From this record, it is clear that the INTELSAT charter is flexible in recognizing the diverse needs of nations and the challenges and opportunities offered by evolving telecommunications technology. Thus, while the proposals now being considered by the United States may appear from the perspective of other countries to be distinguishable from other non-INTELSAT endeavors that they have undertaken or are planning, the question before INTELSAT in the coordination process is not whether the proposed systems are regional in character or are broader in scope.[16] As with other systems which have

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[16] INTELSAT has suggested that the authorization of "intercontinental" or "transoceanic" separate satellite systems as such would threaten significant economic harm to INTELSAT. However, nowhere in the language of the INTELSAT Agreement are such systems specified to be universally incompatible with INTELSAT. In fact, the Agreement plainly states that all facilities proposed to provide public international satellite services separate from INTELSAT should be coordinated on similar terms — i.e., based upon whether the facility is technically incompatible with INTELSAT or threatens it with significant economic harm — regardless of whether a facility would provide "regional" or transoceanic/international services. *See* letter from Santiago Astrain, Director General, INTELSAT, to Kenneth W. Dam, Deputy Secretary of State, U.S.

been coordinated, the question before INTELSAT is avoidance of significant economic harm and assurance of technical compatibility.

39. Second, as reflected by the President's policy determination, the Executive branch White Paper and our decision today, the United States is taking extraordinary measures to avoid economic harm to INTELSAT by placing service restrictions on the new systems. Our imposition of these restrictions is voluntary. There is no obligation, either express or implied, in the INTELSAT Agreement or elsewhere to impose such restrictions. To our knowledge, this action is unprecedented. We take it in order to assure the future economic viability of INTELSAT and its ability to provide services on a global basis. As required by the INTELSAT Agreement, the United States will "furnish all relevant information to and . . . consult with the Assembly of Parties through the Board of Governors" to show why it believes that the imposition of service restrictions on the proposed systems will avoid significant economic harm.[17]

A. General Policy Considerations

1. Current U.S. Policy

40. The Communications Satellite Act of 1962, 47 U.S.C. §§ 701-744 (1984), embodies the United States policy goals on the establishment of international satellite systems. The Act calls for the establishment of a commercial communications satellite system which would meet public needs and national objectives, serve the communication needs of the United States and other countries, and contribute to world peace and understanding by the development of a system through cooperation with other countries. 47 U.S.C. § 701(a). To effectuate these objectives, the Act states that the system to be established should: (1) provide communication services to the economically less developed countries as well as the highly developed countries; (2) promote the use of the most efficient and advanced technology available; and (3) reflect the efficiencies of the system in its rates and services. 47 U.S.C. § 701(b).

41. In the White Paper, the Executive branch sets forth further U.S. international communications and information goals which are to: promote the free flow of information throughout the world; retain U.S. leadership and economical and technological strength in the communications market; expand U.S. involvement in international trade; foster the availability of efficient, cost-effective, and innovative services; fulfill U.S. obligations under the INTELSAT Agreements and support the INTEL-

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Department of State (April 5, 1983) (included as Attachment No. 2 to BG-55-50E, W/6/83). *See* also Meeting of Signatories Document, Resolution of the INTELSAT Meeting of Signatories, MS-13-3E, B/4/83, p. 7 (April 21, 1983).

[17] INTELSAT Intergovernmental Agreement, August 20, 1971, 23 U.S.T. 3813, TIAS 7532 (1973).

SAT organization as a key element in providing all countries of the world access to global communications services; and advocate and adopt international communications policies which foster competition and move toward increasing reliance on market forces, while accounting for differing national policies.

42. Although the Satellite Act provides for the establishment of a global commercial satellite system, it clearly does not require or contemplate a monopoly satellite system.[18] The Act specifically provides for the creation of additional satellite systems if "required to meet unique governmental needs or if otherwise required in the national interest." 47 U.S.C. § 701(d). The President has made the threshold determination that additional satellite systems are "required in the national interest" pursuant to authority under Sections 102(d) and 201(a) of the Act.

2. General Benefits of Competition

43. Introduction of competition into a market has been generally deemed to be a significant and positive step that is beneficial to the public. In the White Paper, the Executive branch states that "advocating and adopting international communications policies which stress reliance on free enterprise, competition, and free trade" are policies necessary to further the U.S. goal of promotion of competition and reliance on market forces.[19] Competition benefits the public interest when it maintains or improves a good service and enhances the economical and efficient provision of communications services.[20] The hallmark of a competitive market is the maximization of customer choice which can be effectuated by allowing multiple entrants (i.e., adopting an open entry policy with little or no entry barriers).[21] With the power of choice, customers are better able to influence the types of services available simply by frequenting one service provider over another. This market pressure not only encourages service providers to be responsive to customer needs, but also encourages them to lower the price of their services in order to obtain a larger share of the market and, therefore, to maximize profits and to offer service in the most efficient and economical manner. The end result of this process is reduced rates and service more responsive to customer needs.

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[18] INTELSAT recognizes that it is not established nor was intended as a monopoly in international communications. *See* INTELSAT Document, entitled "A Critical Review of Responses in the U.S. FCC Proceeding on Separate Satellite Systems," BG-63-35E, p. 3 (May 31, 1985). *See also*, Transborder Satellite Video Services, 88 FCC 2d 258, 274 (1981).

[19] *See* White Paper at 5 and 10.

[20] *See* FCC v. RCA, 346 U.S. 86, 96 (1952); See also, All American Cables and Radio, Inc. v. FCC, 736 F.2d 752, 757 (1984); Telocator Network of America v. FCC, 691 F.2d 525, 544 (1982).

[21] *See* All America Cables and Radio, Inc., 736 F.2d at 758.

44. The domestic satellite industry exemplifies all the benefits of a competitive market. The Commission initially adopted an "open skies" policy to facilitate the entry of qualified parties in this market.[22] Low entry barriers have resulted in a dynamically growing domestic satellite industry. This industry currently includes six satellite carriers, each with several satellites in operation, and numerous resellers and service providers.[23] The Commission has also eliminated the Section 214 authorization and tariff filing requirements for domestic satellite carriers through its *Competitive Carrier Rulemaking*.[24] The pressures of the marketplace and the existence of unregulated resale have encouraged efficient innovative service offerings and cost based prices in this industry, as many of the commenters note.

45. The Commission's *Transponder Sales* decision allows a customer or end-user several options with respect to obtaining transponder capacity.[25] Users may lease capacity from a carrier, buy capacity in bulk for resale, lease or purchase entire transponders or parts thereof on a long term basis, obtain a percentage ownership interest, or choose to buy capacity from a reseller. By studying these options and selecting the best one for the specified business, the customer can achieve greater operational flexibility, fix costs for transmission, and configure the capacity or transponder to meet the business's particular needs. In addition to the benefits of transponder ownership, a customer has a choice of customer premise, shared use or common use general purpose earth stations and a variety of transmit-receive equipment. Finally, there have been significant advances in the design and operation of the spacecraft and ground equipment which have increased these satellites' use and efficiency and allowed for the use of smaller, less expensive earth stations.

46. We have taken a number of measures to introduce competition in the provision of international services. Our relaxation of entry barriers for new international carriers has resulted in an increasing number of new carriers providing a variety of new services.[26] These new carriers

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[22] *See* Domestic Communication Satellite Facilities, 22 FCC 2d 86 (1970) (Domsat I); 35 FCC 2d 844 (1972), *recon. in part*, 38 FCC 2d 665 (1972).

[23] *See* Report and Order, CC Docket No. 81-704 (released August 16, 1983).

[24] Fifth Report and Order, CC Docket No. 79-252, 98 FCC 2d 1191 (1985).

[25] Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1251 (1982), *aff'd sub nom.*, Wold Communications, Inc. v. FCC, 735 F.2d 1465 (1984).

[26] *See* International Relay, Inc., 77 FCC 2d 819, 824 (1980), *on reconsideration*, 82 FCC 2d 41 (1980); Satellite Business Systems, 91 FCC 2d 941, 946 (1982); Western Union Telegraph Company, 91 FCC 2d 1051, 1061-3 (1982); GTE Telenet Communications Corporation, Mimeo No. 2765 (released March 15, 1982) and Tymnet, Inc., Mimeo No. 3223 (released April 8, 1982), *aff'd on application for review*, Computer II International, FCC No. 82-377 (released August 25, 1982); FTC Communications, 92 FCC 2d 463, 468-9 (1982); Argo Communications Corporation, Mimeo No. 1723 (released January 10, 1984); MT Systems Inc., Mimeo No. 5786 (released August 3, 1984); Telecom Plus International,

include Western Union,[27] entering the international record market under the terms of the Record Carrier Competition Act of 1981, 47 U.S.C. §222, and MCI, GTE Sprint and SBS competing with AT&T for international telephone service.[28] In the *TAT-4* decision, we eliminated the voice-record dichotomy in international communications and encouraged the full utilization of digital networks in the international market.[29] We have modified our policy with regard to the ownership and operation of U.S. international earth stations that operate with the INTELSAT global communications satellite system to permit any international carrier or group of carriers to apply for authority to construct and operate such earth stations, whether IBS, television or multi-purpose type. This policy has already resulted in the authorization of 23 new earth stations at several different urban locations to provide video and data services comparable to those proposed by the separate system applicants.[30] Competition in the provision of earth station services is expected to have the indirect benefit of encouraging more equipment manufacturers to enter the market. In our *Authorized User* decision, we allowed Comsat to

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Mimeo No. 5787 (released August 3, 1984); NetExpress Communications, Inc., Mimeo No. 1391 (released December 17, 1984); IsaComm, Inc., Mimeo No. 1342 (released December 3, 1984) and Teltec Saving Communications, Inc., Mimeo No. 1653 (released January 7, 1985).

[27] *See* Western Union, FCC 82-378, Mimeo No. 31938 (released August 12, 1982).

[28] *See* Satellite Business Systems (SBS service to Mexico), Mimeo No. 2816 (released February 26, 1985); GTE Sprint Communications Corporation (GTE service to the United Kingdom) Mimeo No. 2548 (released February 14, 1985); Satellite Business Systems (SBS service to Switzerland) Mimeo No. 2463 (released February 11, 1985); MCI Telecommunications Corp. (MCI service to Greece) Mimeo No. 2461 (released February 8, 1985); MCI Telecommunications Corp. (MCI service to Brazil) Mimeo No. 2432 (released February 7, 1985); MCI Telecommunications Corp. (MCI service to the United Kingdom) Mimeo No. 2081 (released January 23, 1985); MCI International Telecommunications Corporation (MCI voice-only leased channel service to the United Kingdom) Mimeo No. 1855 (released January 11, 1985); GTE Sprint Communications Corp. (GTE service to Australia) Mimeo No. 1775 (released January 8, 1985); MCI Telecommunications Corp. (MCI service to Belgium) Mimeo No. 5894 (released August 10, 1984); MCI Telecommunications Corporation (MCI service to Australia), Mimeo No. 2570 (released February 27, 1984); MCI International Telecommunications Corporation (MCI service to Belgium), Mimeo No. 1501 (released December 22, 1983); MCI Telecommunications Corporation (MCI service to Belgium), Mimeo No. 5894 (released August 10, 1984); Satellite Business Systems (SBS service to Hong Kong and the Netherlands), Mimeo No. 1200 (released December 8, 1983); Satellite Business Systems (SBS service to the United Kingdom), Mimeo No. 32122 (released October 1, 1982); Satellite Business Systems (SBS private line service to Canada), 88 FCC 2d 195 (1981).

[29] Overseas Communications Services, 92 FCC 2d 641 (1982) (*TAT-4*).

[30] *See* Modification of Policy on Ownership and Operation of U.S. Earth Stations that Operate with the INTELSAT Global Communications Satellite System, 49 Fed. Reg. 50030 (Dec. 26, 1984). This decision permitted independent earth station ownership outside of the current ESOC arrangement.

lease space segment directly to users and enhanced-service providers and to provide earth-station and end-to-end service through a common carrier subsidiary. Finally, we granted Cable Landing Licenses to two private companies, Tel-Optik Ltd. and Submarine Lightwave Cable Company, for authority to construct and operate fiber-optic submarine cables in the North Atlantic. We concluded that the introduction of private cable systems would provide users of North Atlantic transmission capacity with new alternatives to satisfy their needs and would further stimulate technology and service development to the benefit of international communications users.[31] We concluded further that, with the advent of these cables, the benefits of owning and leasing transmission capacity available to domestic satellite communications users would now be available to the international communications user.

47. In these decisions, we found that competition in the international area would give users increased choice of services and carriers, provide more accurate cost information for users to make an informed choice, give users more flexibility in tailoring a communication system to meet their specific needs, result in technically superior service to consumers, enhance the efficient use of facilities and create downward pressure on costs and rates for the designated services. We also stated that the introduction of competition in the aforementioned areas of the international market would present no major economic hurdles and would not greatly affect our foreign partners in INTELSAT.

48. In view of our findings in these decisions that public benefits will result from the introduction of competition internationally, the Department of Justice contends that the Commission has ample grounds for a finding "... that authorization of additional satellite systems would satisfy the public interest standard of the Communications Act without making detailed specific findings as to the probable economic results of increased rivalry." While we agree with DOJ that we may rely on our findings in past actions with respect to the benefits of competition, we believe that our responsibilities under the Communications Act require a more thorough analysis of the probable results of authorizing separate satellite systems. In particular, we must determine whether competition in the supply of international satellite facilities is feasible and, if so, whether public benefits will result from such competition.[32] These determinations require us to consider the specific benefits of the proposals before us.

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[31] *See In re* Tel-Optik Ltd., FCC 85-99 (released April 3, 1985).

[32] *See* cases cited in footnote 20.

3. Review of Specific Proposals

49. Those parties supporting the introduction of separate satellite systems contend that, even with the Executive branch restrictions, competition for "customized" services would result in technological and service development, competitive rates, and other benefits presently available in the competitive domestic satellite market. On the other hand, other commenters challenge these claims and argue that these systems would only duplicate services currently offered by INTELSAT without any specific advances in the technology or system efficiency.

(a) Findings by the Senior Interagency Group.

50. In its White Paper, the Executive branch concludes that the introduction of separate satellite systems could: 1) provide new diversity and flexibility in satellite services; 2) create and expand markets in new areas of satellite services; 3) create incentives for INTELSAT and the signatories to be more efficient in their provision of satellite services; and 4) allow outside financing sources to undertake the speculative, high-risk ventures in communications, thereby allowing INTELSAT to focus on expanding its provisions of basic communication services in a financially conservative manner. Also, the Executive branch finds that additional satellite systems limited to "customized" services will: 1) provide more flexible options to communications users and advance more efficient provision of international satellite communications than those services presently available; 2) promote the development and use of satellite technology; and 3) afford U.S. entrepreneurs an opportunity to develop new communication services and to increase trade opportunities.

51. The White Paper also states that there are "sound reasons" to forecast positive effects on international trade if separate satellite systems are approved. It concludes that, with the expected reduction in the cost of international communication services, frequent users such as U.S. financial services and data processing companies will be able to increase their use of services and, therefore, business activity in the provision of international communications services will increase. The Executive branch believes that "[n]ew communication service options and resulting efficiency gains should be reflected ultimately in lower costs to consumers and, in the case of U.S. firms, would enhance the attractiveness of their products in international markets." It finds that there should be an additional positive effect on the U.S. service sector in general.[33] And it finds that the authorization of separate systems would advance the U.S.

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[33] According to the White Paper, the services sector in recent years has become one of the largest exporters of U.S. goods, i.e., services, and thus is a major factor in the U.S. balance-of-payments accounts. Since the U.S. services sector is increasingly dependent on international communications to conduct its business, any beneficial effect, specifical-

defense interests by contributing to the variety of facilities necessary to ensure constant and effective international communications and by improving the survivability of the U.S. national telecommunications infrastructure.

(b) Comments by Service Providers and End-Users.

52. Several service providers, end-users, and user-groups support the authorization of separate satellite systems. They maintain that INTELSAT does not offer a sufficient range of services at reasonable prices. And they contend that separate systems offer a substantial variety of efficient and innovative services at reasonable prices.

53. First, these parties observe that satellite transmission costs are distance insensitive and that there is a substantial disparity between domestic satellite transmission costs and international satellite transmission costs for comparable services. Since satellite transmission costs are distance insensitive, they contend that the price differential is the result of INTELSAT being the single provider of transoceanic satellite services. ESPN states that without another entity offering similar services and acting as a check on improper and excessive pricing practices, INTELSAT is not easily influenced by market demands and therefore is able to charge inflated rates. Turner includes in its comments a study which compares the current rates for domestic satellite services with the newly filed Comsat international television rates,[34] and international communication services rates which cannot be accounted for by the additional costs associated with Comsat's participation in the INTELSAT system.

54. Second, several parties contend that INTELSAT only offers a limited range of services. They argue that since INTELSAT is a common-user, ubiquitous system which focuses its efforts on providing global connectivity for basic services, INTELSAT has not developed a broader range of innovative or flexible services. The FTC contends that INTELSAT's failure to provide Ku-band multi-point distribution service has hampered the development of the international cable television and video market. Ethereum contends that although INTELSAT may offer all the basic types of services, such as telephony, data, television and audio services, it has a limited range of offerings in each service category. Ethereum states that it has not been able to offer television service to small earth stations in Europe because of INTELSAT service restrictions. HBO also cites a situation in which it had difficulty obtaining satellite

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ly an expansion of communication service options, should contribute to the growth of the U.S. services sector.

[34] Due to our recent Earth Station Ownership decision, Comsat has recently filed new "unbundled" tariffs which separate the cost of the international space segment from the cost of the ground segment. Comsat traditionally had both components of communication costs in one tariff. *See* Earth Station Ownership, *supra,* note 26.

transmission service for television over North Atlantic facilities and eventually had to settle for an arrangement at a considerable increase in cost.

55. Third, many parties contend that, in addition to the limited range of services offered by INTELSAT, there is a corresponding lack of flexibility in obtaining services. They contend that INTELSAT does not offer a transponder on a sale or long-term lease basis. Thus, they argue that a customer is unable to have the transponder configured or designed to meet its particular needs and is relegated to obtaining service through Comsat on an occasional use or short-term lease basis. They emphasize that a bulk or frequent user of international communication services could purchase the amount of capacity desired and guarantee the availability of the capacity it needs and also lock in the price it would pay. ESPN points out that by buying or leasing transponders on a long-term basis, customers would guarantee price stability and predictability in the provision of services. Ethereum states that with ownership of capacity a customer could have the beam coverage and beam power designed for its specific needs. API states that alternative systems would use the increased flexibility in providing satellite services to design new services in order to attract new customers. NTIA states that the major difference between INTELSAT and alternative satellite systems would be transponder or space segment capacity ownership.

(c) Benefits that the Applicants Believe Will Result from Their Proposals

56. The applicants generally contend that their proposals, if approved, would result in significant public benefits because they seek to serve markets which INTELSAT does not now and will not in the future adequately serve. They primarily seek to provide business data and video distribution services through the sale or lease of space segment capacity to be operated with small, low cost earth stations located at or near the customer's premises. They contend that as a result, customers will achieve greater operational flexibility and significant savings compared to INTELSAT's services. They also contend that the design of the INTELSAT system generally does not permit emphasis on the types of services that they are proposing.

57. *Orion:* The essence of Orion's proposal is to enable large communications users to purchase a transponder; install small, low-cost user-premises earth stations at its locations in the United States and Europe; and thereby configure, own and operate its own network for "in-house" communications such as data collection and distribution, video transmission, teleconferencing, high speed facsimile, remote printing, teletext and videotext. Orion believes: (1) that those specialized users needing this type

of customer premises service (CPS) are not well served by general public service providers which engineer systems to serve large primary markets; (2) that INTELSAT has designed a system primarily for public-switched services which features satellites operating with a small number of large gateway earth stations in each country in order to maximize connectivity over large areas in each ocean region; (3) that maximum connectivity requires maximizing the number of individual links or routes served by each satellite; (4) that the design assumes the existence of a terrestrial switched network which channels "random" traffic into the system through large gateway earth stations; and (5) that the INTELSAT system design provides an inefficient means of communication for CPS users whose traffic is not based on random distribution patterns and who have relatively concentrated connectivity requirements. Orion states that the customer premises service which it seeks to provide would offer to users a relatively low cost for the volume of information transferred, reliability, high data rates, security, greater control over end-to-end costs, and guaranteed access to satellite facilities. Orion contends that achieving requisite levels of connectivity, security, user control and low overall costs requires the use of multiple, small and inexpensive earth stations and the maximization of satellite EIRP (equivalent isotropically radiated power) through the use of beams focused at specified points to serve those stations. To accomplish this, Orion states that it has designed a system in which transponders are substantially more powerful than INTELSAT's. It concludes that INTELSAT cannot provide, by means of its current and presently-planned facilities, the same throughput levels, multi-point capacity and reduced size in earth terminals as are possible in its proposed system.

58. *ISI.* ISI believes that new entry in the international satellite market will lead to: (1) new services; (2) more efficiency in the provision of all services; (3) stimulation of latent demand; and (4) more rapid technological innovation. It states that under its proposal, large users could purchase or lease whole transponders and moderate or small users could obtain space segment capacity by purchasing or leasing units of space segment capacity as small as equivalent T-1 circuits. It anticipates that its primary market will be video distribution of programming on a customer premises basis, thereby permitting customers to avoid the service degradation and high cost of landline or domestic satellite extensions to international earth station facilities. ISI believes that grant of its application will serve the public interest by providing new services, new forms of facility use and new operational arrangements for international satellite use in the United States.

59. ISI contends that INTELSAT's basic mission is to interconnect domestic telephone, telex and television systems through national gate-

way earth stations. However, ISI believes that there is a need for other services for U.S. and European users who would like to distribute video and high speed data from a single satellite throughout the contiguous United States (CONUS) and Western Europe on a cost-effective basis, using low-cost earth stations located at urban customer premises. It maintains that this type of service cannot be provided by any INTELSAT spacecraft in orbit or under construction. According to ISI, cost-effective video conferences will be possible interconnecting customer premises earth stations in San Francisco, New York, London and Rome for simultaneous transmission and viewing. In addition, it states that programming originating in Europe can be distributed to cable headends and broadcasting stations throughout CONUS, and, likewise, European cable headends can be reached from uplinks anywhere in CONUS. ISI contends that no other satellite system under construction or yet proposed can provide these services. It states that INTELSAT could approximate this service by using more than one satellite, dual earth stations an double hopping, but at greater cost and use of orbit/spectrum resources. ISI states that its proposed satellite is four times more spectrally efficient than INTELSAT's use of the Ku band for INTELSAT Business Service (IBS).

60. *RCA*. RCA primarily plans to provide international video services for distribution but also intends to offer teleconferencing and commercial communications service, including private leased voice, low speed data communications and point-to-point medium speed data communications to Europe and portions of Africa. RCA believes that there is a potentially large unaddressed market for satellite distribution of premium video programming in Europe. It therefore would concentrate on distribution of international video signals to small earth stations serving European cable television systems, and thus provide European programmers and film companies with access for the first time to most U.S. domestic cable television systems and independent broadcasters. RCA maintains that INTELSAT has not promoted international video services in this manner because of its primary focus on international MTS, which led to its large and costly high-gain earth stations and its global satellite network configured for international MTS. INTELSAT's orientation toward high-gain earth stations, has resulted in Comsat offering television service from five points in the United States which are located away from the metropolitan areas where television programs are usually produced. RCA points out that it has earth stations in or near ten major U.S. metropolitan areas. According to RCA, distribution of international video services is now restricted by the terms, conditions and rates of Comsat's tariffed services through INTELSAT and the isolation of INTELSAT from marketplace trends and its slowness to react to changes. RCA believes

that INTELSAT's slowness to react to market trends stems from its organizational structure, orientation toward MTS and treaty obligations. It contends that authorization of its system would result in direct contact between the market and the provider of satellite service and thereby eliminate delays in the introduction of new services. It further contends that its proposal will provide greater flexibility in customer use of leased or purchased transponders (use for video during prime time European television view hours and data during off-peak hours), and result in increased customer choice of earth station locations. Finally, RCA states that introduction of competitive satellite services will result in lower prices. It anticipates that rates for a full-time Satcom transponder will be less than INTELSAT's rates and states that it is planning the introduction of rates below those offered in the market.

61. *Cygnus.* Cygnus proposes to sell or lease on a long-term basis transponders to users such as video suppliers, distributors and television networks, multi-national corporations, financial service companies, time-critical information delivery service, international trading and freight distribution companies and U.S. government agencies which have needs for: (1) digital communications such as teleconferencing, high speed facsimile, computer to computer communications, remote printing, teletext, videotext, data collection and distribution services; (2) private voice services; and (3) video programming distribution services involving the use of small roof-top receivers. According to Cygnus, the high power output and gain of its satellite design will enable its signal to be received by small and relatively inexpensive micro earth stations ranging from 2.0 meters to be used in conjunction with business micro computers (to transmit and receive data at rates up to 224 Kbps). Among other points, Cygnus contends that the size limitations of IBS earth stations are much more restrictive than those of its proposal in terms of the type of services offered and the potential pool of available users. In contrast to the compatibility of its proposal with earth stations as small as 0.8 meters in diameter, Cygnus contends IBS can only be provided through earth stations of specified sizes, including, besides the very large standard-size INTELSAT stations (designated A, B, and C), the E-1 (3.5 meters), E-2 (5.5 meters) and E-3 (8 meters) size earth stations. Cygnus states that while the estimated cost of IBS-compatible standard-E earth stations may range from $150,000 to $600,000 each, earth stations compatible with the Cygnus system will likely cost as little as $25,000. Cygnus concludes that its earth stations will be used by small as well as large business users in view of this cost differential. It states that the use of very small stations will allow customers to have multipoint-to-point and point-to-multipoint data networking services that will not be available with IBS. And it also states that the most critical difference between IBS and its proposal has

to do with the charges at which their respective services can be provided because IBS rates are necessarily tied to the Comsat tariff structure—a structure that Cygnus claims is inherently incapable of permitting the type of cost savings that users could realize from Cygnus. Under the Comsat IBS tariff, Cygnus argues that it is more economical to use the larger stations than the relatively smaller ones because the Comsat space segment charge, which is a recurring charge, is higher for small stations than for large ones.[35]

62. Cygnus states that its design also will allow customers to use off-the-shelf, small roof-top antennas which are currently being used or will be used in the future in the U.S. domestic direct-to-home satellite market. Cygnus states that mini earth stations (ranging from 2.0 to 4.5 meters) and main earth stations (ranging from above 4.5 meters) will be compatible with the satellite design and can be used by customers with higher volumes of private voice and data communications traffic. Through use of these small stations, Cygnus states that customers will have available direct, single-hop access to the satellite, resulting in greater customer flexibility and cost savings from the elimination of expensive terrestrial links and coordination with multiple carriers.

63. *PanAmSat*. PanAmSat would sell or lease transponder capacity on a non-common carrier basis for international communications within the region comprising the United States, Latin America and the Caribbean and for domestic communications within Latin America and the Caribbean. PanAmSat proposes to offer both Ku-band and C-band service. The Ku-band service would provide various specialized services, such as broadcast and data transmission for intra-regional traffic. The C-band service would offer domestic services, including high power television transmission. PanAmSat argues in general terms that its proposed services are either not currently provided by INTELSAT or are offered in a costly and inefficient manner. The market it wishes to serve, it claims, has yet to be substantially developed and would not develop through reliance solely on INTELSAT, due to the (latter's) economic and technical constraints. PanAmSat claims that the power of INTELSAT's transponders is appreciably weaker than that of the transponders in its proposal. As a result, PanAmSat concludes, INTELSAT could utilize only large, high cost earth stations and could therefore not afford to provide services other than between large towns with a high level of telephone traffic density. It claims that the Ku-band service it proposes to offer is neither provided currently nor planned to be provided by INTELSAT. According to PanAmSat, because of the smaller antenna sizes possible utilizing the

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[35] For example, Cygnus states that the charge for using the E-3 station is only 1.25 times the Comsat basic charge, while that for the smaller E-2 station is 1.7 times the basic charge, and that for the even smaller E-1 is 2.8 times the basic charge.

Ku-band and the decreased problems with interference in the Ku-band, this service would allow the efficient and economic development of broadcasting and data services, such as customer premise services.

(d) Challenges to Claimed Benefits of Separate Systems

64. Those commenters opposing the authorization of separate systems argue that these systems would not provide the competitive benefits claimed by the applicants but would only duplicate services already available through INTELSAT. They argue that none of the applications proposes a new technology or new services.

65. IRI points out that INTELSAT offers the same ability as Orion to use small earth stations with its IBS and INTELNET II service offerings. In addition, IRI states that Cygnus' proposal to use spread spectrum techniques for small earth station connectivity is an essential characteristic of the INTELNET II offering. Amb. Abbott Washburn maintains that the applicants for separate systems would not provide any services INTELSAT does not offer presently or would do so in the future. He contends that none of the putative benefits of these systems has been proved and that no new satellite technology or significant changes in satellite configuration or arrangements are being proposed. Amb. Washburn states that bulk capacity through long-term leases, the longest being a seven-year lease, at a fixed price is available for tailored services and, currently, 28 countries use it for domestic services. Moreover, he says that INTELSAT offers two levels of services designed to meet customers' specific needs. The first level is bulk capacity in which the customer leases the transponder and designs his own services with the desired configuration and earth station. The second level of service is one in which the customer approaches INTELSAT to design the service and guarantee a certain performance level. Thus, both IRI and Amb. Washburn conclude that the services proposed by these systems would be redundant and would not bring any benefits to the international satellite industry. In fact, they both state that to the extent the systems promise efficiency, INTELSAT could change and offer the same efficiencies. They also maintain, as does Walter Hinchman & Associates that, if separate systems were allowed to enter the market, the foreign communications monopolies, the PTTs, would usurp any of the economic benefits these systems might provide in the international satellite industry by engaging in the practice of whipsawing. Since the system owner needs to get the permission of the government or an operating agreement with the PTT in order to transmit and receive in that country, the parties argue that the foreign government (itself or through its PTT) with monopoly control can extract all the economic competitive benefits that the applicants claim

would become available in the international satellite industry.[36]

66. In addition, two Board of Governors documents[37] set forth the INTELSAT management response to the applicants' claims. These documents state that real competition would not exist because the new systems would be non-regulated while Comsat, the U.S. Signatory of INTELSAT, would remain a regulated entity. They contend that in order for genuine competition to exist, the new entrants should be subject to the same rules and regulations as Comsat. For example, they should have to justify their new services, technological innovation or charges for the services. In addition, they state that the applicants are proposing no new services or technology and that INTELSAT offers all the services and technologies that the applicants propose. The documents state that INTELSAT offers small earth station transmission, high power transponders and a range of satellite coverage. They claim that INTELSAT has the same flexibility as Orion to offer high-power satellite beams with a small antenna earth station; that it can sell or lease capacity; and that IBS, a non-preemptible service, is available with nine different earth station options on a full-time, part-time, or occasional use basis. In addition, they state that PanAmSat's comparison of the anticipated cost of its transponders to INTELSAT's transponders is misleading, since the transponder prices being quoted, $700,000 per year, are for an as-yet-unbuilt system. The documents state further that it now offers leases for international video service and domestic service and offers a wide variety of service periods, coverage beams and annual charges. They also dispute PanAmSat's claim that its customers would be able to use a small antenna earth station when INTELSAT's customers must use more expensive earth stations. They state that a country leasing domestic service from INTELSAT has a choice as to the size of the earth station it may use, and that INTELNET services may be used with a variety of small earth stations.

67. According to these documents, INTELSAT has every incentive to be economically efficient and innovative. First, they maintain that INTELSAT is not a monopolist but is subject to competition from cable facilities and, in many instances, landline or microwave facilities that provide substitutable transmission capacity. Second, INTELSAT is subject to competition in situations where INTELSAT members can load traffic on various facilities. In view of these factors, the documents

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[36] For purposes of our discussion, we may refer exclusively to the PTT, typically a government-owned monopoly, in referring to the foreign entity. In reality, U.S. satellite system operators may have to deal with the PTT or another government organ, depending upon the country.

[37] *See* INTELSAT Documents, "A Critical Review of Responses in U.S. FCC Proceeding on Separate Satellite Systems," BG-63-35E (May 31, 1985); and "INTELSAT Statements on Proposed U.S. Policies on Separate Satellite Systems," BG-63-37E (June 7, 1985).

conclude that INTELSAT must continue to provide technologically superior satellite services, especially when fiber-optic submarine cables and increasingly sophisticated land-based facilities are developed.

4. Conclusions as to Public Benefits

68. At the outset, we emphasize that, from the perspective of the types of information that can be carried over a given satellite network, the services now offered or planned by INTELSAT are generally comparable to those proposed by the separate system applicants. INTELSAT services permit the transmission of voice, record, audio programs, facsimile, video teleconferencing, television programs and data. The separate system applicants have not proposed to provide services that would accommodate any other types of information.[38] However, within these broadly defined and widely recognized service categories, there exist any number of variations of packaging and transmitting the information from one place to another. It is in this area that we find that the proposed separate satellite networks would differ markedly from INTELSAT. These differences will be significant in terms of satisfying yet unmet customer needs and applying competitive pressure on INTELSAT to attempt to meet these needs.

69. INTELSAT has understandably designed its satellite networks and service offerings to provide international switched services on a global basis. In general, INTELSAT procures and operates space segment facilities which feature high-capacity, low-power satellites, and which must be operated with large, high-gain antennas at expensive earth stations. These earth stations serve as national gateways to a country's public-switched terrestrial networks. Because this system design is intended to provide the widest possible global connectivity, it is well suited to the provision of international telephone and other switched services. However, generally, it is not as cost effective or efficient for many other types of services, particularly point-to-multipoint and multipoint-to-point services which require a number of earth stations, as are the proposed separate systems. These services are most efficiently provided by use of small earth stations located at or near a customer's premises, operating with high power satellites and/or satellites in the 11-12/14 GHz band.

70. To provide small earth station services, INTELSAT has both modified space segment facilities and specifically planned new space segment facilities that will provide higher power beams in the 11-12/14 GHz bands. It has also introduced IBS. IBS is a totally digital integrated

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[38] Some separate system applicants have proposed, however, to allow the transmission of new variations on these types of signals, such as the transmission of high definition television which requires more spectrum than is permitted with INTELSAT television services.

transmission service over which a wide range of information services can be provided to customers at earth stations located at or near their premises. In addition, INTELSAT has introduced a service, INTELNET, designed to provide point-to-multipoint data service to earth stations with very small antennas. INTELNET uses spread-spectrum modulation techniques to allow for such small earth stations. INTELSAT also has introduced a variety of new international video services which it states are tailored to meet specific user requirements and involve, in some instances, distribution of signals to small earth stations serving cable television systems. These new video services are offered to the operators of small earth stations through the use of unused transponder capacity. Use of small earth stations is made possible by devoting more transponder bandwidth, and corresponding power, to the TV carrier than is ordinarily the case.

71. All parties in this proceeding recognize the benefits available through the use of small customer premises earth stations that give the user direct access to the satellite. The user can achieve cost savings by elimination of the need to use national gateway earth stations and expensive terrestrial facilities between those stations and the customer's premises. In addition, the user can achieve greater operational flexibility and security through choice of earth station location, limited dependence on the availability of terrestrial facilities and ownership, and operational control of the earth stations. These factors, with concomitant ownership or long-term lease of space segment capacity, give the user an opportunity to have its communications space network configured to meets its special needs in ways not offered through currently available facilities.

72. INTELSAT recognized both the benefits of small earth station services and the potentially significant unmet demand for such services when it decided to introduce its new IBS, INTELNET, video and other services. For example, it forecast rapid growth of IBS when it decided to initiate this new service.[39] The Director General stated that market demand for video services has: "out-paced the supply of the INTELSAT capacity currently allocated for this purpose with the result that there has been a loss of revenues due to service denial. There appears to be potentially significant unmet demand for a variety of new international video applications involving, in some instances, distribution of signals to smaller earth stations serving cable television systems."[40]

73. The primary differences between the services proposed by the applicants and the services currently provided or planned by INTELSAT

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[39] *See* INTELSAT Document, "INTELSAT Business Services," BG-56-50E (August 29, 1983).

[40] *See* INTELSAT Document, "Preemptible International Video Services on Satellites other than Primary/Major Path Satellites," BG-58-46E (rev. 2) (June 16, 1985).

are in (1) satellite downlink power, (2) areas of coverage and connectivity, and (3) opportunity to purchase or lease transponders on a long-term basis.

74. As to the first area, our review of information provided by INTELSAT to the International Frequency Registration Board of the International Telecommunication Union for international coordination of its space stations and information contained in the INTELSAT tariff manual, leads us to conclude that, for any given configuration, the proposed separate systems would be able to provide downlink powers greater than can be provided by INTELSAT. This capability will permit the separate systems to create combinations of service enhancements depending on specific customers' needs that include the use of smaller earth stations and/or higher information transmission rates than are possible with INTELSAT satellites.[41] Thus, although INTELSAT provides services comparable to the proposed separate systems in terms of the type of information transmitted, it cannot, as a general matter, match the proposed separate systems in achieving combinations of earth station size, transmission rates, connectivity, user control, security and costs that may be desired by a user with special needs. INTELSAT can make tradeoffs in available bandwidth, information transmission rates and other service parameters to offer a comparable combination of factors to that user. But such tradeoffs would result in system inefficiencies not present in separate systems that are specifically designed to provide various combinations of service enhancements. For example, INTELSAT's tariff manual shows that nine sizes of earth stations may be used for IBS. The smallest is 3.5 meters in diameter — larger than those proposed by some of the separate system applicants. However, INTELSAT has claimed that IBS customers can use any size earth station.[42] But to achieve this capability, INTELSAT would have to allocate more bandwidth per channel to permit antenna sizes matching that to be offered by the proposed separate systems. This smaller earth station capability would only be available to bulk leases of transponder capacity (from 9 MHz to 72 MHz) for periods ranging from one to seven years. As a

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[41] As we will discuss, two applicants, Orion and Cygnus, propose satellite downlink powers which exceed limitations on power flux-density contained in the International Radio Regulations and, accordingly, we are requiring amendments to their applications to come into compliance with the Radio Regulations. Nonetheless, they still will be able to achieve permissible satellite downlink powers greater than those offered by INTELSAT and, by making trade offs in receiving equipment characteristics or information transmission rates, they still will be able to provide service to earth stations with antennas as small as proposed in their applications.

[42] *See* INTELSAT Document, "INTELSAT Statements on Proposed U.S. Policies on Separate Satellite Systems" BG-63-37E (June 7, 1985).

general matter, INTELSAT would have to make similar tradeoffs to match separate system offerings in other service areas.

75. It would be neither necessary nor meaningful to speculate on all of the potential system configurations that INTELSAT may undertake to match separate system offerings. However, we note that INTELSAT's management makes the general statement that "[h]igh power transponders are available at 6/4 GHz, as well as 14/11 or 14/12 GHz. for domestic, TV, IBS and other services working to earth station antennas down to two feet in diameter".[43] It appears that the two-foot earth stations referred to may be those that operate with INTELSAT's INTELNET service which, as stated above, uses spread spectrum techniques and not "high power transponders" that would permit use of such small earth stations for other services. Nonetheless, the higher power of the satellites proposed by the separate system applicants still will permit them to offer the spread-spectrum type service either to smaller earth stations or at higher data transmission rates than available with the INTELNET service.

76. With respect to coverage area and connectivity of satellites providing customer-premises services, some of the networks the applicants have proposed will provide full or nearly-full coverage of the contiguous United States (CONUS) *in a single 11-12/14 GHz beam* INTELSAT does not and will not have such capability. INTELSAT'S current 11-12/14 GHz service only covers approximately one-third of CONUS. INTELSAT'S planned 11-12/14 GHz services would only provide full-CONUS coverage with the use of two satellites. Therefore, a European entity wishing to distribute information to all of CONUS would have to arrange for service from two uplink earth stations over two satellites when only one of each would be required with some of the proposed separate satellites. As ISI stated in its comments, "by using more than one satellite, dual earth stations and double hopping, INTELSAT could provide service approximating that described . . . [b]ut such a method of operation would obviously be far more costly in money and in use of orbit spectrum resources. . . . " Ethereum specifically noted a case where, although not requiring a double hop, it had difficulty attempting to arrange for television service from INTELSAT between its Houston uplink and small earth stations in Europe. Due to lack of coverage of the Houston area by an 11-12/14 GHz INTELSAT beam, Ethereum would have been required to uplink at 6 GHz and have the signal cross-strapped at the satellite to 11-12 GHz at an additional charge. Such problems, and problems far more complex than that reported by Ethereum, can be avoided by use of the systems proposed by the applicants.

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[43] *Id.*

77. In addition, INTELSAT does not provide 11-12/14 GHz coverage, or high power coverage in any band, to South America for any services. PanAmSat proposes such coverage which will be significant in the reduction or elimination of the need for terrestrial facilities, and in achieving lower earth station costs. By way of illustration, PanAmSat notes in its comments the findings in a report prepared by the Andean Regional Telecommunications Association, ASETA, that while there would be significant cost savings by using an INTELSAT transponder over a domestic satellite transponder, the high costs associated with INTELSAT earth stations would be so substantial that the crossover point on overall system economics from INTELSAT to a domestic system is achieved when only eight additional earth stations per transponder are used. While we will not debate the precise numbers here, PanAmSat clearly will provide a grade of service comparable to a typical domestic satellite system, and there is no question that, given the costs of earth stations necessary for INTELSAT services, the savings in those costs can be great enough to reduce substantially overall system costs by the use of the PanAmSat satellites.

78. The third area of difference between INTELSAT and the proposed separate systems is particularly significant in terms of satisfying those customers with special service needs. INTELSAT states that it is permitted to both sell and lease space segment capacity.[44] It does not now, however, offer to sell transponders. INTELSAT does currently offer a variety of long-term leases for IBS, INTELNET, domestic leased and video services.

79. In comparison, each separate system applicant intends the sale of space segment capacity to be a primary aspect of its operation. Their proposals provide a means of attaining for international users the same benefits that are now available from the sale of domestic transponders. In our *Transponder Sales* decision, we concluded that the private sale of transponder capacity on a non-tariffed basis would: (1) permit the providers of capacity to make tailored and flexible arrangements with customers that are not possible under the regimen of a tariffed service offering; (2) enable customers to make long-term plans for the use of facilities with assurance as to facility availability and price; (3) permit systems to be specifically designed to customer needs; and (4) result in positive market development for new and innovative service offerings.[45] We find here as we did in authorizing private submarine cable facilities[46] that users with bulk capacity needs for special service requirements for international services should enjoy the same benefits.

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[44] *Id.*

[45] *See* Transponder Sales, 90 FCC 2d at 1251-1252, 1255.

[46] *See* Tel-Optik Limited, *et al.*, Order FCC 85-99 (released April 5, 1985).

80. In general, users gain greater control over such factors as design, availability, use and costs when they are permitted to own space segment capacity. Control over these variables and the options that would be offered by competing facility providers, including INTELSAT, will permit customers to meet special needs that they now are unable to satisfy. As NTIA points out, each separate system would have a different configuration of transponders, provide different degrees of connectivity and operate at different transmitting powers. Thus, a user could choose which system is most capable of satisfying his special needs in terms of these factors, and, within the technical parameters of the satellite system, specify the required beam coverage (zone, hemi-, or spot) and the beam power at which he wishes to operate. The user's selection of beam power would depend on ground segment needs (number and size of earth stations within the network) and desired transmission rates. This operational flexibility would assure the user of the availability of transmission capacity for the period of time desired at an established price. Long-term business plans could be made accordingly. The user could not be similarly assured that transmission capacity will be so available from current common carrier offerings since carriers must offer capacity indiscriminately as it is available and may change the price and other terms and conditions of their offer through tariff filings.

81. In addition to the ability to fix transmission costs, purchasers of space segment capacity would enjoy other financial benefits.[47] In our *Transponder Sales* decision, we found that transponder sales would make it possible for small users to finance a purchase of a transponder as a result of the tax benefits that accrue and the ability to collateralize the transponder as a tangible asset when a monthly lease payment might have been too expensive. These same benefits would accrue to purchasers of international space segment capacity. They would be able to depreciate the satellite equipment if it is used for business purposes and use the equipment as collateral for loans.

82. As the comments reflect, many users are dissatisfied with the insufficient service choices offered by INTELSAT in the past and with the inflexible and inadequate arrangements and a lack of responsiveness. We find that the operational flexibility which would be offered by the

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[47] The sale as well as the long-term lease of transponders or space segment capacity will provide benefits to the separate satellite system operators. Just as in our domestic transponder sales order, we conclude here that sales and leases of transponders or space segment capacity in the international satellite industry are an additional financing mechanism which would provide a means for satellite operators to raise necessary capital either before or after the satellite is operational and a mechanism which would promote risk-sharing. Moreover, new entrants will better be able to gauge market demand for their services through their ability to seek capacity and transponders before the satellites are operational.

proposed separate systems would give these users a means of satisfying their needs. Users will be able to establish the type of satellite communications networks envisioned in the comments. For example, users such as Gannett could buy capacity on a separate system configured according to specific requirements for point-to-multipoint communications so that it could transmit newspapers, magazines and similar information to various discrete foreign locations for printing and distribution. The petroleum companies could purchase capacity and establish dedicated networks to send or receive data, with distant exploration sites and to communicate with foreign offices and agents. Broadcasting entities such as Turner, ESPN, HBO, WOLD and the three networks could establish dedicated television transmission facilities for the exchange of sports, information, and entertainment programming between the United States and other countries. Here the assured availability of transmission facilities would be particularly important both for long-term program planning and promotion and for transmission needs for sudden news events. The U.S. broadcasting and cable television industries were the primary beneficiaries of the U.S.. "open skies" domestic satellite policy and the resulting increase in programming distribution options.

83. We disagree that the competitive benefits would accrue only to the large communications users and not to the public at large. Small users should be also able to benefit from the operational flexibility offered by ownership of space segment capacity. Although a user may not have bulk requirements requiring full transponder ownership, the user may have specialized needs that justify a time sharing arrangement with other users who jointly acquired capacity. We agree with the Turner comments which point out that with respect to broadcasting, a decrease in communications costs for the broadcasters may lead to a decrease in prices for their programming which should benefit the end-users and result in an increase in demand for programming. This same analysis applies to other users which could decrease their international communications costs and pass on those savings to their customers. The financial benefits of owning transponders or space segment capacity might make the capacity more affordable to the small users. The authorization of separate satellite systems does not constitute a revolutionary change in the international communications market. It is an evolutionary change. INTELSAT itself has acknowledged that it must compete with submarine cables and satellite systems which, in certain circumstances, other signatories have a choice of using. In addition, fiber-optic submarine cables will increase competition once they become operational in the next few years.

84. We conclude that the establishment of separate satellite systems will provide substantial benefits to users of international satellite communications services. The introduction of competition with INTELSAT

within the service area defined by the Executive branch will provide many of the same benefits to international users that are now provided to users by U.S. domestic satellites. Separate systems will provide currently unavailable service enhancements to users with special communications needs, stimulate technology and service development and reduce user-costs. We recognize that INTELSAT has begun to introduce services which are comparable to many of those proposed by the separate systems. Although many of these services have been long under consideration, we can reasonably conclude that INTELSAT's effort to expedite the implementation of these services was spurred, in part, by the existence of the separate system applications.[48] We join NTIA in expressing our approval that INTELSAT is responding to potential competition with new service offerings. While INTELSAT may take the view that its response eliminates any need for separate systems, we believe that competition spurs and continually encourages innovation and efficiency.

85. With regard to the PTT's ability to take advantage of its strategic position in the market and to reap a disproportionate share of the competitive benefits by engaging in traditional whipsawing, we find that the circumstances typically associated with the practice of whipsawing are not present in relation to separate satellite systems. The term

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[48] Since Comsat is a common carrier under the Communications Satellite Act of 1962, 47 U.S.C. § 401 (1984), the Commission must approve Comsat's investment in any space segment program. INTELSAT and other parties have claimed that the U.S. regulatory process has delayed the offering of IBS, INTELNET and the new video services to U.S. customers. We do not find this to be the case. Comsat's application to participate in INTELSAT's IBS program was filed with the Commission on October 12, 1982. Comsat stated that the application would have to be periodically updated since INTELSAT was still weighing various operational options with respect to IBS. Comsat filed a supplement to the application on January 4, 1983 and letters on August 12 and November 7, 1983 providing additional information about the applications. Comsat stated in its November 7 letter that this letter together with its previous filings completed its application. The application proposed, *inter alia*, that IBS would be provided using existing Comsat earth stations as well as specialized IBS earth stations to be constructed in urban areas. The application was granted on March 30, 1984. In addition, Comsat filed an application on July 19, 1983 to construct an IBS earth station on Staten Island, New York. This application was also granted on March 30, 1984 after an amendment by Comsat requesting authority to construct a larger earth station than originally proposed. Comsat could have initiated IBS service from existing earth stations prior to its Staten Island earth station becoming operational. However, the Comsat IBS tariff on file with the Commission did not provide for IBS service from existing Comsat earth stations. Instead, the Comsat tariff provided only for space segment services using customer provided earth terminals. At that time there were no independently owned earth terminals in operation to provide IBS. Comsat did, from time to time, file tariffs for 1.544 Mbps IBS service using the Etam, West Virginia earth station on a temporary basis. It was not until January 31, 1985 that a full array of IBS service options became available when IRI initiated service from its newly constructed earth station which was authorized by the Commission on March 30, 1984.

"whipsawing" has normally been used in the context of accounting rates and settlements share for switched services where several U.S. common carriers deal with a single PTT. In this proceeding, the separate satellite systems will be allowed to provide private line-like services and will not be allowed to provide switched services so the potential for accounting rate manipulation is not present. Private line-like services entail no revenue sharing because the U.S. common carrier charges a rate for one half of a circuit and a PTT charges a rate for the other half. Nonetheless, we recognize that as long as foreign governments have control over an essential component of the end-to-end service, such as the foreign ground stations, they can control the price of the total service by manipulating the charges for their component. PTTs could exercise this price manipulation by charging excessive usage fees, requiring additional payments to obtain access or requiring a U.S. firm to purchase an earth station at an excessive price from the PTT. While we are not predicting that this type of whipsawing will occur, there are certain measures available to us and the U.S. Government as a whole to counteract such possible whipsawing. We would view such satellite system price manipulation to be inconsistent with the purposes of the Communications Act and we reserve the right to condition licenses that we issue, if such practices are undertaken by PTTs. In addition, we are requiring the separate system operators to file with the Commission all operating agreements they enter with foreign entities and are reserving the right to reconsider the authorization of a satellite system which enters an operating agreement with satellite procurement restrictions. (See para. 209, *infra* .) Moreover, the U.S. Government, as part of its decision to enter in the consultation process pursuant to Article XIV(d) for any particular satellite system, may require the applicants to submit all financial agreements with all foreign parties including governments, PTTs and correspondents for its review. The U.S. Government reserves the right to refuse to begin consultation procedures if such arrangements are not in the U.S. interest.

86. We disagree with those parties which argue that if INTELSAT is capable of providing the proposed services, the separate satellite systems will be duplicative and, therefore, unnecessary. We also disagree with the position of the INTELSAT management that the applicants and this Commission have a "burden of proving that INTELSAT does not or cannot offer features and capabilities provided by the proposed systems."[49] These views ignore the benefits of competition. Multiple entry of service providers, customer choice and service overlap are hallmarks of competition. Without a certain overlap of service offerings, there would be no meaningful customer choice and there would be little incentive to innovate with lower prices or greater responsiveness to customer needs.

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[49] BG-63-37E. *supra*, n. 41.

Each separate system operator will make a business judgment on technical design and marketing to meet user needs. As NTIA concludes, the separate system proposals reflect the kind of entreprenurial judgment and risk-taking which this government seeks to facilitate and encourage. In the *Comsat Study,*[50] the Commission recognized that, at some time in the future, the United States would have to decide whether INTELSAT continues to serve U.S. international communications needs. It is this ultimate question we are considering today. We find the following: that there is an unfulfilled demand for service enhancements that meet specialized needs of users of international communications; that separate systems offer customers alternative suppliers to fulfill their special needs; that no single space segment provider should be expected to provide the variety of special services that can be offered by multiple suppliers; and that authorizing competition to INTELSAT within this limited and specialized service area is feasible and will result in the further development of this market and service innovation. We conclude that these public benefits are desirable, and, as we will discuss, are attainable without causing significant economic harm to INTELSAT.

B. Economic Impact on INTELSAT

1. U.S. Obligations Under Article XIV(d) of the INTELSAT Agreement

87. Article XIV of the INTELSAT Agreement sets forth particular rights and obligations of the parties and signatories.[51] Subpart (a) of the article provides that when exercising their rights and fulfilling their obligations, the parties and signatories shall act consistently with, and in furtherance of, the principles in the Preamble and other provisions of the Agreement.[52] The Preamble states that the parties to the Agreement desire to create a single global commercial telecommunications satellite system as part of an improved global telecommunications network in order to provide telecommunications services throughout the world with the most efficient and economic facilities.[53] Article XIV recognizes the possibility that parties may want to use non-INTELSAT space segment to fulfill their international telecommunications services needs. Subpart (d) requires parties to coordinate with INTELSAT the use of non-INTELSAT space segment for international public telecommunications services, stating as follows:

> To the extent that any Party or Signatory or person within the jurisdiction of a Party intends individually or jointly to establish, acquire or utilize space segment facilities

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[50] Communications Satellite Corporation, 77 FCC 2d 564, 627-628 (1980).

[51] INTELSAT Intergovernmental Agreement, August 20, 1971, 23 U.S.T. 3813, 3853, TIAS No. 7532.

[52] *Id.*

[53] *Id.* at 3814.

> separate from the INTELSAT space segment facilities *to meet its international public telecommunications services requirements*, such Party or Signatory, prior to the establishment, acquisition or utilization of such facilities, shall furnish all relevant information to and shall consult with the Assembly of Parties, through the Board of Governors, *to ensure technical compatibility* of such facilities and their operation with the use of the radio frequency spectrum and orbital space by the existing or planned INTELSAT space segment and *to avoid significant economic harm* to the global system of INTELSAT. Upon such consultation, the Assembly of Parties, taking into the account the advice of the Board of Governors, shall express, in the form of recommendations, its findings regarding the considerations set out in this paragraph, and further regarding the assurance that the provision or utilization of such facilities shall not prejudice the establishment of direct telecommunication links through the INTELSAT space segment among all the participants.

23 U.S.T. at 3854 (emphasis added). Once this consultation process is commenced, the INTELSAT Assembly of Parties must render, in timely fashion and in terms of non-binding recommendations, findings as to whether the utilization of separate satellite facilities would be technically compatible with the use of the INTELSAT space segment and would not result in significant economic harm to the global INTELSAT system.

88. The meaning of the phase "significant economic harm" is not so apparent as to provide clear guidance from which to ascertain whether the use of non-INTELSAT space segment facilities for international public telecommunications services is economically compatible with a global INTELSAT system for purposes of the INTELSAT Agreement. Nowhere in the INTELSAT Agreement is this broad language clarified to provide qualitative or quantitative criteria as to what type or amount of economic harm is sufficient to be "significant." Further, the negotiating history of the INTELSAT Agreement, which suggests only that the modifier "significant" was employed as a compromise between "substantial" and "any" economic harm,[54] affords little help to those who must apply the "significant economic harm" test to a particular context.

89. The findings of the Assembly of Parties with respect to previous coordinations conducted pursuant to subpart(d) of Article XIV also do not define "significant economic harm" for the purposes of the INTELSAT Agreement. To date, INTELSAT has coordinated favorably several separate satellite facilities providing international public telecommunications services. The previous coordinations where INTELSAT has found that a separate satellite system provides public telecommunications services economically and technically compatible with INTELSAT are: (1) the U.S. maritime satellite system (MARISAT), proposed to provide services to each major ocean basin and later extended to accommodate the system's use by the International Maritime Satellite Organization (INMARSAT); (2) the European Communication System (ECS), proposed to

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[54] *See* First Intersessional Working Group (IWG) Document, "Summary Record of IWG" (May 22, 1970).

serve intra-Western Europe traffic and established through the creation of a European Telecommunications Satellite Organization (EUTELSAT) by certain member nations of the Conference Europeanne des Administrations des Postes et des Telecommunications (CEPT); (3) the PALAPA system, proposed to serve Indonesia, Malaysia, Singapore, Thailand and the Philippines, but not to service traffic connecting any two international centers in the region; (4) the ARABSAT system, proposed to serve those countries comprising the Arab league with domestic and intra-regional satellite communications capability; (5) the use of the Intersputnik system to provide services between Algeria and several Eastern European nations, the U.S.S.R. and Cuba; (6) the MARECS satellite network, with respect to its proposed utilization by INMARSAT; and (7) U.S. domestic satellite systems proposing to provide certain "transborder" services between the United States and certain neighboring countries.[55]

90. In favorably coordinating these systems, INTELSAT has utilized an *ad hoc* approach in its determination of significant economic harm.[56] The evaluation process considered the specific circumstances involving each satellite system and took into account various factors for assessing economic harm.[57] However, no qualitative concepts or numerical tests were developed to provide clear guidance as to what would constitute the threshold of significant economic harm in future coordinations. Hence, in determining, for the purposes of this proceeding, whether the authorization of the separate systems may cause significant economic harm to INTELSAT, we will develop an approach which takes into account the particular circumstances presented by the proposed systems and the Executive branch service restrictions. This approach requires that those service restrictions be clearly defined as to scope and applicability.

2. Executive Branch Restrictions

91. As we have stated, the Executive branch has determined that, in order to ensure U.S. fulfillment of its international obligations as well as furtherance of both telecommunications and foreign policy interests, any

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[55] *See* INTELSAT Document, "Policies, Criteria and Procedures for the Evaluation of Separate Systems Under Article XIV(d)" (hereinafter cited as "The Article XIV Coordination Document"), BG-60-69E (August 22, 1984) (available in Public Reference Room (533), Federal Communications Commission). *See also* INTELSAT Documents "Report of the Board of Governors to the Assembly of Parties Pursuant to Article XIV(d) Concerning Coordination of the European Communications Satellite System," BG-37-54E (March 16, 1979) and "Report of the Board of Governors to the Assembly of Parties Pursuant to Article XIV Concerning Coordination of the Arab Communications Satellite Systems (ARABSAT)," BG-41-51E (March 14, 1980).

[56] *See* The Article XIV Coordination Document, *supra,* at p. 34-35.

[57] *See* INTELSAT Document "Intersystem Coordination Procedures: Proposed Procedures for Implementation of Article XIV(d) Requirements Concerning Significant Economic Harm," BG-28-63E (June 29, 1977).

separate satellite system authorized by the Commission "...is to be restricted to providing services through the sale or long-term lease of transponder or space segment capacity for communications not interconnected with public switched message networks (except for emergency restoration service)."[58] The Executive branch would impose this service restriction in order to avoid significant economic harm to INTELSAT. It recognizes that no regulatory regime can be "air-tight." But it believes that such restrictions are sustainable, particularly in view of the multinational character of international services and the fact that foreign PTTs police the services provided by companies serving their countries.

92. In our Notice, we requested comment on a variety of issues raised by the Executive branch service restrictions, including: (1) the need for the service restriction; (2) the legal standards by which it may be imposed; (3) the need for any time limit on the restriction; (4) the specific services which would fall within the scope of the restriction; (5) the extent to which the restriction could be implemented in actual practice; and (6) the effect such a restriction would have on the competitive viability of the proposed separate satellite systems. We received diverse views on these issues.

(a) Comments on the Restriction

93. Each applicant stated that it could accept and would adhere to service restrictions, with some qualifications on the scope and applicability of the restrictions. Orion states that it does not oppose the restrictions or believe that a time limitation on their applicability is necessary. Orion believes that the Commission can implement the restrictions by incorporating them in instruments of authorization. ISI contends that the Commission is bound by the restrictions but has flexibility in interpreting and implementing the restrictions under its public interest standard. Specifically, ISI requests the Commission to limit the restrictions to five years following the grant of a construction permit and thereafter extend them only by affirmative findings based on experience. Cygnus states that the restrictions do not constitute an unreasonable constraint, that it can conduct a viable, cost-effective operation in the immediate future by targeting private corporate users and other commercial entities for data, private voice and video programming services, and that it would take all reasonable precautions to ensure that its customers not offer public switched service. However, Cygnus does not rule out some future reexamination of the restriction. RCA states that it will abide by whatever restrictions are ultimately imposed. However, it believes that the restrictions should not be regarded as fixed, but as a reasonable, provisional means of managing the inevitable transition of international satellite

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[58] Letter from George P. Schultz, Secretary of State, and Malcolm Baldridge, Secretary of Commerce, to Chairman Fowler (November 28, 1984).

services from a monopoly to a fully competitive environment. RCA believes that the restrictions can be successfully implemented. It questions whether the restrictions are intended to cover telex services and MTS provided by non-dominant carriers. PanAmSat supports the restrictions and states that the Commission clearly has authority to impose them. PanAmSat interprets the restrictions as precluding common carriage arrangements and only permitting new entrants to sell or lease all of their capacity on a contractual or non-tariffed basis. It believes that the restrictions are enforceable because: (1) the Commission will retain jurisdiction to monitor licensee activities; (2) no licensee would risk its large investment by intentionally or carelessly violating the conditions of its authorization; (3) foreign telecommunications agencies can be expected to enforce the restrictions; and (4) currently available technology and equipment can assure the effectiveness of the restrictions.

94. Comsat states that workable, effective restrictions must be placed on separate systems in order to protect INTELSAT. However, Comsat points out that the difficulty of maintaining a distinction between private (or "customized") services and public-switched services. It contends that the "no-interconnection" condition will not by itself be sufficient and urges that the Commission must apply its telecommunications expertise and experience to fashion operational requirements that will achieve the President's objectives. Comsat believes that the intent of the Executive branch restrictions is to limit separate systems to the provision of international leased channel or private-line services. It argues that demand for customized services will fall short of capacity and that separate satellite system operators will have economic incentives and technical ability to invade the public switched domain. It also argues: (1) that there is interchangeability or substitutability among conventional and customized services; (2) that large corporations have sufficient traffic volume to divert traffic from the public-switched network; (3) that resale or shared use of separate system facilities would further enlarge the number of potential business users; and (4) that there are a variety of techniques which would make enforcement of the restriction difficult. In view of these factors, Comsat maintains that there could be large scale bypass of INTELSAT without effective Commission action. Comsat believes that an effective regulatory plan should limit purchasers or lessors to classes of users that, by their nature, have a recognizable need for private or intracorporate communications; prevent private networks from being reconfigured to replicate the public-switched network; and establish policy, operational, and technological means to prevent interconnection with the public switched network. Comsat states that the Commission should forbid the sale of capacity to common carriers; prohibit service for hire, resale, and shared use; ban interconnection with

the public-switched network; establish minimum unit sizes available for sale or lease; adopt a precise definition of the phrase "long-term;" and make all restrictions applicable not only to separate system operators but to all users of such systems. Comsat states that a reasonable minimum unit of space segment capacity would be one half transponder (18 MHz). Also, it states that a long term lease should be for a minimum of five years. It states that sales and leases must be on a full period, 24-hour, seven-day-per-week basis.

95. Two other parties take positions similar to that of Comsat. IRI states that there are serious technical and practical difficulties with the Executive branch restrictions, and that further clarification and refinement are required. IRI believes that the prospects for enforceability of the restrictions are dim at best, in view of the U.S. experience with widespread use of "leaky PBXs," the financial incentive of large business customers to use private system capacity for international calls either originating or terminating in the public-switched network, and the difficulty in detecting or measuring PBX leakages. In addition, IRI believes that the term "customized services" and the concept of "sale or long-term lease of transponders or space segment capacity" are lacking in definition. It suggests that the minimum lease term should be roughly equivalent to the lifetime of the satellite and that minimum capacity levels should be established. Finally, apart from these clarifications, IRI argues that further conditions should be imposed: (1) a showing that proposed services are not susceptible to efficient provision by INTELSAT and that use of INTELSAT facilities would be uneconomical and impractical; (2) a correspondent relationship between the applicant and foreign operating authorities; and (3) a demonstration by the applicants of the adequacy and enforceability of specific safeguards that they will impose to prevent interconnection of their services with public-switched networks.

96. Amb. Abbott Washburn contends that any restriction will be difficult, if not impossible, to enforce, that the "leaky PBX" has long been recognized by the Commission as a prevalent and vexing problem, and that, in the case of separate satellite systems, system operators would have the same severe policing difficulties as the Commission since the leaks would occur on the customers' private networks using purchased or leased transponders. Amb. Washburn also contends that the Executive branch restrictions should not "sunset." He argues that the Presidential determination does not include a "sunset" provision, nor does its rationale and criteria allow such a development. Amb. Washburn states that the importance of the restrictions in maintaining INTELSAT's viability by maintaining a narrow scope of services available to separate systems will not diminish over time. Amb. Washburn also maintains that the Commission must impose restrictions on interconnection between separate sys-

tems and on resale and sharing. He argues that absent a ban on interconnection between separate systems, there would be substantial bypass of the INTELSAT public switched network. Finally, he further argues that any restriction on the scope of services would be rendered meaningless if resale of capacity made available by sale or long-term lease of transponders is permitted.

97. Three of the applicants, ISI, PanAmSat and RCA, oppose the additional restrictions proposed by Comsat. The other two applicants, Orion and Cygnus, did not comment on the additional restrictions. ISI states that the imposition of Comsat's multiple restrictions would not leave it or any other applicant much to sell. ISI contends that it could not take advantage of new technology and its inherent facility and service flexibility to tailor capacity to individual needs. It interprets the Executive branch limitations to apply to switched message services such as switched voice (MTS) and TWX/telex. It contends that the purpose of the restriction is to protect INTELSAT from loss of its principle revenue stream, which is switched voice traffic. Other switched message services, such as packet-switched or other switched data services account for a very small portion of INTELSAT's revenues, according to ISI.

98. PanAmSat states that none of Comsat's additional restrictions are included in the Presidential determination, with the exception of the no-interconnection restriction and the "long-term" restriction of leases. PanAmSat agrees that a definition of "long-term" lease is needed but finds the terms suggested by Comsat and IRI unreasonable. Alternatively, PanAmSat suggests that the Commission propose minimum lease terms similar to those currently offered or prepared by INTELSAT, Comsat and the new IBS providers. On the other hand, PanAmSat does not believe that a minimum unit of capacity for lease or sale needs to be set since such a restriction would limit the applicant's flexibility in responding to user needs. As to the imposition of resale and shared use restrictions, PanAmSat contends that the new private networks will not substitute for the public-switched network given the "no-interconnection" restriction. It also contends that small corporations without the volume of traffic that would support the purchase or long-term lease of transponders would be barred from achieving the cost savings and flexible arrangements offered by the proposed separate systems if resale and shared use are prohibited. Finally, PanAmSat notes that the proposed international private cables have not been burdened by the same restrictions proposed by Comsat and that it would be unfair to impose the restrictions on the private satellite applicants.

99. RCA argues that Comsat's proposal to prohibit use of separate systems by U.S. international carriers would disserve users that prefer to acquire pre-assembled and packaged foreign international service from a

carrier rather than to acquire the separate components themselves. RCA believes that there is no reason to impose resale and shared use restrictions in advance when conformity with international practice can be achieved by the imposition of such conditions through a carrier's tariff, pursuant to arrangements with foreign correspondents. In addition, RCA contends that Comsat's proposal for a minimum unit of capacity would place use of the separate systems beyond the reach of many users. Finally, RCA maintains that Comsat's proposal that all sales and leases be on a full-period, 24-hour, seven-day-per-week basis is without warrant in the Executive branch recommendations and would serve no useful purpose other than to maintain all occasional-use television as the exclusive preserve of Comsat. As long as each user commits for a period long enough to meet the Executive branch's service restrictions, RCA argues, the objectives of those restrictions would be fully satisfied.

100. The Ad Hoc Telecommunications Users Committee expresses reservations about the restrictions. The Ad Hoc Committee questions whether the "no-interconnection" restriction can be, successfully implemented and if it would limit too severely a new entrants competitive opportunities. If the Commission determines that such restrictions are necessary, the Ad Hoc Committee urges the Commission to define the precise scope and application of the restrictions in order to permit investors and users to make sound and informed commercial decisions and to minimize future misunderstandings with INTELSAT and foreign authorities. The Ad Hoc committee opposes Comsat's proposed additional restrictions as unnecessary to protect INTELSAT and argues it would impose significant competitive restraints on separate system operators.

101. ABC, CBS and NBC also oppose Comsat's proposed additional restrictions. The networks contend that common carriage and resale restrictions on television transmission service are unnecessary to protect INTELSAT's MTS business and would significantly impair the ability of a separate system to compete for television transmission business, both for occasional service and full-time transponder leases. In addition, the networks place particular importance on occasional use service and specifically urge that separate system operators be permitted to offer occasional or part-time service on a common carrier basis.

102. The American Petroleum Institute believes that the Executive branch restrictions would be impractical and impossible to enforce. In any event, API contends that it should not apply to customers. API argues that some traffic in an intracorporate network must go over the telephone network and the restrictions would limit customers too severely. In contrast, Wold Communications believes that the restriction will be both enforceable and judicially sustainable and that any modification or elimination of them must be based upon a change in market conditions.

Wold believes that the separate satellite system operator must bear the burden of demonstrating changed conditions if it wishes to be relieved of the restrictions.

103. AT&T believes that the Executive branch bar on interconnection with public switched message networks is not sustainable and probably is, at best, a transitional device that cannot be relied upon to provide long-term protection to INTELSAT because it will inevitably erode. First, AT&T contends that since separate satellite system operators will have a substantial investment upon which they will seek to earn a return, and the international private line market is not large enough to fill the capacity of the proposed private systems, the separate system operators will have the economic incentive to provide public-switched services. Second, AT&T states that monitoring would be difficult because there is no way to determine whether streams of information originate or terminate in a public switched network. Third, AT&T believes that enforcement of the restrictions would be difficult because the Commission would have no jurisdiction over users or control over the foreign end, and because remedies against the satellite system operators either would be too draconian or fraught with evidentiary problems. AT&T also states that the Executive Branch "no-interconnection" restriction would cause market distortions by creating a disparity between the price of leased channels and the price of services over public-switched networks. IMTS suppliers would be forced to use higher cost INTELSAT satellite circuits while private line users would be able to use lower cost private facilities. According to AT&T, this situation would give large users the incentive to abandon the public switched network which would depress growth in the public switched network. AT&T argues for a fair chance to compete and suggests an automatic termination date of 1989 for the Executive branch restrictions. AT&T opposes Comsat's proposed additional restrictions, maintaining that they would ensure that the market segment available to separate systems would be so narrow as to seriously threaten their viability. In particular, AT&T contends that Comsat's proposal to prohibit common carrier use of the separate systems is inconsistent with Presidential objectives and would eliminate the best-positioned potential users of the separate systems who can provide the customized services envisioned by the Executive branch as the principle benefit of separate systems. Finally, AT&T opposes RCA's suggestion that only AT&T's IMTS should be subject to the Executive branch restrictions. AT&T maintains that the effect of this proposal would be to create a blatantly discriminatory handicap for AT&T in the North Atlantic market.

104. The Federal Trade Commission contends that no service restrictions are warranted because they will limit benefits of competition offered by the proposed separate systems. It recommends that the Commission

authorize the new systems without substantially restricting the type of traffic they may carry. The Department of Justice states that the Executive branch determination forecloses any argument against the need for restrictions, although the precise form of the restrictions may depend to some extent on the results of negotiations with foreign authorities and the results of the INTELSAT consultation process. In addition, DOJ states that the Executive branch can recommend removal of the restrictions in the future if they become unnecessary. Finally, NTIA emphasizes the need for the Executive branch restrictions to protect INTELSAT's core revenues which are derived from its provision of facilities for public-switched message services. NTIA maintains that the restrictions are enforceable and that widespread violations are unlikely to occur.

(b) Need for Restrictions

105. There appears to be substantial agreement that some kind of operational restrictions on separate satellite systems will be necessary to avoid significant economic harm to INTELSAT. We conclude that operational restrictions will be necessary. We believe that the Executive branch approach to assure the avoidance of significant economic harm is a reasonable and workable approach. It properly balances the continuing U.S. commitment to INTELSAT with our goal of obtaining the benefits of competition in international communications satellite services. By prohibiting separate systems from interconnecting with public-switched networks, these restrictions would protect INTELSAT's "core" revenues obtained from supplying space segment capacity for international switched message services. Peripheral or "customized" services would be subject to competition between INTELSAT and separate satellite systems. Although the restrictions will limit customer use of separate systems, the potential benefits from introducing competition on a limited basis are still substantial, as we have described, and are worthy of pursuit.

106. In addition, the Executive branch restrictions are an integral part of a Presidential determination that weighs foreign policy, national security, economic and trade considerations as well as telecommunications policy interest. The restrictions are intended to ensure that the United States meets its international obligations. As a result, the Commission must accord the Executive branch determination the greatest deference and should not reject or substantially modify such determination absent further consideration by the Executive branch.

107. We cannot agree, however, with those commenters who argue that the Commission need not consider issues concerning the economic impact of the proposed systems on INTELSAT. Those commenters

maintain that the Executive branch process in reviewing these issues was exhaustive and need not be repeated by the Commission. They also maintain that the Commission's role is limited to reviewing the applications to determine whether the Executive branch criteria have been satisfied and whether the applicants have the requisite legal, technical and financial qualifications under the Communications Act of 1934 to be issued a license. We agree that we should not ignore the Executive branch restrictions or override them without further consideration by the Executive branch. But, implementation of those restrictions will require the Commission to impose conditions on any licenses that it may grant for separate satellite systems, as well as U.S. earth stations that operate with the systems. From a regulatory perspective, this agency has the responsibility and expertise to review the telecommunications and related economic issues that must be considered in deciding to impose such conditions. Also, U.S. policymaking in the rulemaking and licensing process must include on-the-record public comment (or petitions to deny, as the case may be) which was not a part of the Executive branch process. The comments and replies that we have received show that the Executive branch restrictions require clarification and further definition as to their scope and applicability in order to ensure their effectiveness.

(c) Scope and Applicability of Restrictions

108. The Executive branch restrictions must be defined more precisely in order to: (1) prepare and furnish all relevant information to INTELSAT for consultation under Article XIV(d); and (2) impose license conditions which are clear and understandable. We indicated in our Notice a need to identify the services which fall within and outside the scope of the restrictions. The language of the restrictions defines the permissible services by a negative—"Communications that are not interconnected with public-switched message networks." The White Paper states that separate systems should be limited to "customized" services as defined in the White Paper.[59] It further states that such services *involve* the sale or long-term lease of transponders or space segment capacity for communications not interconnected with the public-switched networks, and *include* intracorporate networks and television transmission. The term "customized" generally means "to build, fit or alter according to individual specifications."[60] However, intracorporate networks can include a range of services such as conventional private line services which may not necessarily be "customized" but are nevertheless needed to satisfy intracorporate communications needs. In addition, with respect to the

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[59] Both the Executive branch restriction and the White Paper state that "customized" services would include emergency restoration service.

[60] Webster's *New Third World Dictionary*, Copyright 1971, p. 560.

concept of "long-term lease," neither the Executive branch restrictions nor the White Paper state how long a "long-term lease" must be to comply with the restriction. Nor do they specify a minimum unit of space segment capacity that can be made available through sale or lease. They do not state whether resale and shared use of the space segment capacity are barred. If resale is permissible, it is not clear whether resale must be only by sale or long-term lease and whether a "minimum unit" restriction must apply. Finally, the White Paper is silent on whether the separate satellite system operators may engage in common carriage and whether they may sell or lease capacity to common carriers. If common carriers are to be permitted to acquire capacity, it is not clear what restrictions apply to their use of the capacity other than the "no-interconnection" restriction.

109. Although we agree with Comsat and other commenters that implementation of the Executive branch restrictions requires more detailed definition, we need not adopt "explicit, detailed rules," to achieve this objective. We believe that incorporation of the operating restrictions that we adopt in this proceeding as specific conditions to the instruments of authorization will effectively accomplish the same purpose. We may achieve our regulatory goals by making a reasoned determination that particular operating restrictions are in the public interest and expressly include those restrictions in the instruments of authorization.[61]

110. Any attempt to clarify and further define the Executive branch restrictions must start with a clear understanding of what services are intended to be barred from separate systems. It is clear that the purpose of the Executive branch restrictions is to avoid significant economic harm to INTELSAT by protecting its "commercial core," which the White Paper defines as "public-switched traffic."[62] It is also clear that in order to assure this goal, the restrictions must apply to communications originating in foreign countries and destined for the United States as well as communications originating in the United States destined for international points. In addition, they must continue to apply at the "foreign-end" of the circuit for communications originating in the United States. The comments that we have received, however, show disagreement as to what services fall within the term "public-switched traffic." Some commenters interpret the term as referring only to message telephone service (MTS), whereas Comsat believes that it is also intended to include record service, alternate voice-data (AVDs) and data services. RCA does not believe that it should include telex or "non-dominant" MTS.

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[61] *See* MCI Telecommunications Corporation v. F.C.C., 561 F.2d 365 (D.C. Cir. 1977), *cert. denied*. 434 U.S. 1040 (1978).

[62] White Paper at 30.

111. The White Paper attempts to describe "public-switched traffic" by historical revenue figures and also in terms of projected circuit utilization. It first describes "public-switched traffic" as the full-time voice, record and data services that account for 86 percent of the total utilization revenues that INTELSAT receives.[63] The White Paper observes from INTELSAT forecasts that "transatlantic voice grade circuits will continue to be composed overwhelmingly of message telephone service (MTS) and related switched services."[64]

112. We believe that it is clear that the Executive branch intends that services in addition to MTS are to be barred from separate satellite systems. But the White Paper is unclear as to which additional services are to be included. The "86 percent" figure cited by the White Paper is from the 1983 INTELSAT annual report. It includes revenue derived from non-switched services such as AVDs and private line voice, record and data services as well as switched services such as MTS, telex and telegraph and high-speed switch data. Moreover, the remaining 14 percent of the revenue that is derived from leasing transponders, from providing SPADE service (SPADE service provides satellite circuits on demand, one circuit at a time, for public switched telephone traffic; each circuit forms a link only for the duration of a telephone call), and from providing facilities that carry occasional services such as television, the restoration of submarine cables and the temporary demands created by special events, includes at least some switched services, since AT&T leases SPADE circuits to provide MTS.

113. The White Paper analysis of INTELSAT traffic projections presents a similarly confusing picture. That analysis includes the following table from the June, 1982 INTELSAT *Global Forecast* for 1988:

14,185	MTS[65]
113	Record Service
1,259	Alternate Voice Data (AVD)
46	Data
15,603	Total voice-grade (4 kHz) circuits

From these data, the White Paper observes that according to INTELSAT forecasts, MTS alone comprises 14,000 of 15,603 satellite voice-grade circuits to 18 European countries, and concludes that "[u]nder the Executive Branch approach, new entrants would thus be barred from providing services which are directly competitive with some 90 percent of

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[63] White Paper at 30.

[64] White Paper at 34.

[65] The 14,185 figure cited by the White Paper as only MTS actually represents both MTS and private line voice projections. The INTELSAT Global Report generally labels this entry as "voice" and not specifically MTS. The "113" figure cited by the White Paper in the table above as "Record Service" includes both switched telex and telegraph service and non-switched private line record services.

INTELSAT's voice-grade offerings . . ." Since it is the 14,185 figure listed for MTS which is 90 percent of the total voice-grade circuits forecast for 1988 to the 18 countries involved, services in the remaining categories are presumably not barred to separate satellite systems. This conclusion, however, would permit separate systems to provide switched telex, telegraph, and high speed data services as well as AVDs and private line services. Thus, while the White Paper's description of public switched traffic by historical revenue figures would include some non-switched services, its description of public-switched traffic in terms of projected circuit utilization would appear to exclude some switched services as well as non-switched services.

114. We believe that a reasonable approach to clarifying what services are barred from separate systems is to identify those services that are switched services. Interconnection with the carrier networks over which these services are provided is barred. Separate systems would be permitted to provide all other services subject to the limitations set out in the Executive branch restrictions and further defined by this Commission. First, MTS is a switched service and separate systems may not interconnect any MTS switched network. All MTS is barred whether or not it is provided by AT&T or any new and smaller carrier such as MCI, GTE Sprint and SBS. Telex, TWX telegraph and teletext services generally are switched services. Interconnection with IRC networks to access these services is barred as is interconnection with carrier switched networks providing facsimile or low speed and high speed switched data services. Private line voice record services are not switched and may be provided by separate systems. AVDs have been considered from their inception to be a form of private leased line.[66] We do not agree with Comsat that the White Paper intends to regard AVDs as a switched service and bar separate systems from providing them for intracorporate use.[67] There is simply no basis to consider AVDs as a switched service. As to other services, the White Paper explicitly states that separate satellite systems may provide television transmission services which do not involve the switched network. However, videoconferencing and associated audio may involve

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[66] *See* AT&T Co. and Radio Corp. of Puerto Rico *et al.*, 28 FCC 221 (1960) (authorizing the provision of private line voice-grade channels with alternate use for telephone-data-teletypewriter transmission).

[67] Comsat's claim appears to be based on a misreading by its consultant of the White Paper analysis of INTELSAT's 1988 projected voice-grade circuit utilization shown in the table above. This claim is inconsistent with both the White Paper's statement that 90 percent of INTELSAT's voice-grade offerings are barred from separate systems and the White Paper's table which shows the 90 percent figure as representing MTS, and while the remaining 10 percent included in record service, AVD and data. If the White Paper intended to bar 100 percent of INTELSAT's voice-grade offerings, then it would have so stated and no purpose would have served to single out 90% of those offerings.

the switched network. Separate satellite system operators may not interconnect with the carriers' switched networks to provide these services. In sum, we regard the term "public-switched message networks" for purposes of implementing the Executive branch restriction to include those facilities established to provide switched message services such as MTS, telex, TWX, telegraph, teletext, facsimile and high speed switched data services. Generally, no communications provided over the separate system space segment may interconnect with these networks, either directly or indirectly.[68] Thus, for example, separate system users would not be permitted to interconnect their facilities to the MTS network through a PBX or by the manual interconnection of a switchboard operator. Neither would a data circuit obtained from a separate system be permitted to interconnect with a public switched message network if it terminates in a computer that can store and process the data and subsequently retransmit it over that network.

115. Having determined what constitutes a "public switched-message network," we must consider the intent and meaning of "customized services" as introduced in the White Paper. The term does not appear in the language of the Executive branch restrictions. The use of the term in the White Paper essentially presents us with an attempted definition of what services separate systems may provide, while the language of the Executive branch restriction states what services a separate system may not provide. It is not clear from the White Paper's statement that "customized services include intracorporate networks and television transmission," whether this definition is intended as exemplary of services which may be provided or is exclusive of all other services. The problem is that there are services, which, although not "intracorporate" in nature or involving "television transmissions," are still not interconnected with public-switched message networks. For example, the Ad Hoc Committee emphasizes the need for private line connections between U.S. firms with non-affiliated foreign entities, such as agents, franchisees, distributors and suppliers. Although not interconnected to public-switched message networks, these services are neither television transmissions nor do they involve internal, private communications between corporate offices. Comsat appears to believe that the Executive branch restrictions are intended to limit use of separate satellite system capacity to purely internal, private communications between corporate offices, other than

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[68] A customer of a separate satellite system may not have a customer premises earth station through which service could be originated and/or terminated. In such cases, some connection would have to be established between a downlink, whether owned by the separate system operator or a common carrier, and the customer's premises. This would not present a problem where the connecting circuit is a distinct channel, such as a private line, not part of a switched network.

television transmission. This interpretation establishes a further limitation not expressly stated in the Executive branch restriction. It would go beyond and contradict that restriction by proscribing separate systems from providing certain non-switched services. In its reply comments, NTIA makes it clear that both users and carriers may have the opportunity to obtain capacity on the proposed systems. It is reasonable to assume that carriers would obtain capacity to provide non-switched services to users and not just for their internal, corporate communications. In addition, we note that the White Paper anticipates that firms providing financial services and data processing companies could benefit from the lower costs that separate systems may offer, and states that "worldwide credit card and electronic funds transfer operations, for example, may be heavily dependent on the availability of efficient, dedicated satellite communications network."[69] None of these functions are necessarily "intracorporate" in nature. Thus, we believe that NTIA's comments reflect an Executive branch intention that the White Paper's definition of "customized services" is intended as exemplary and not exclusive. We conclude that "customized services" is intended as a term generally descriptive of the services that separate systems may provide and is not intended to further narrow the language of the Executive branch restrictions. That language limits separate systems to the sale or long-term lease of space segment capacity for communications not interconnected with public-switched message networks. By this language, the Executive branch intends to limit competitive ventures to international leased channel or private-line type services which are tailored or "customized" to meet special customer needs. The "no-interconnection" and the "sale or long-term lease" aspects of the Executive branch restrictions are intended to ensure customer use of separate satellite system capacity for its "customized" services.

116. The proposals of Comsat to impose additional service restrictions are intended to clarify: (1) how a separate system operator may provide service; (2) what unit of capacity may be provided; (3) what lease periods may be made available to customers; and (4) what the customer may do with the service. As we have already stated above, Comsat proposes that separate satellite system operators not be permitted to operate as common carriers; that common carriers not be permitted to obtain space segment capacity from separate systems; that resale and shared use of separate satellite system space segment capacity be prohibited; that a minimum unit size of capacity available for sale or lease be established; that a precise definition of the phrase "long-term" be adopted; and that all restrictions applicable to separate system operators be applied to users of the systems. Comsat believes that these restrictions are necessary to

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[69] White Paper at 42-43.

prevent private networks from duplicating the public-switched message networks and threatening INTELSAT's "core" business.

117. As to the question of how separate system operators may provide services, we conclude that the phrase "sale and long-term lease" in the Executive branch restrictions together with the use of the term "customized services" in the White Paper is indicative of an Executive branch intention that separate satellite system licensees are not to operate as common carriers. Our conclusion here is further supported by the White Paper which refers to separate satellite systems as "noncommon carrier, satellite systems."[70] We have previously found that the sale or long-term lease of satellite transponders by satellite owners is a factor supporting a determination that the offering does not constitute common carrier activity.[71] In that decision, the Commission applied the definition of common carriage as set forth in the *NARUC I* decision and concluded that the sellers of domestic satellite transponders under consideration there would not hold themselves out indifferently to serve the user public.[72] For the most part, we find no distinction between what the separate satellite system applicants propose and what we found to be non-comon carrier activity in our *Transponder Sales* decision. Rather, they are to operate in a manner similar to domestic satellite operators which provide domestic satellite capacity on a non-tariffed basis in the manner anticipated by the Commission in adopting its *Transponder Sales* decision.[73] Three applicants (Orion, Cygnus, and PanAmSat) propose to provide space segment capacity on this basis. Two applicants (ISI and RCA) propose to provide some common carrier services as well as offer space segment capacity on a non-tariffed basis. While we are today concurrently granting ISI and RCA conditional Title III applications, we are denying the Section 214 portion of their applications.[74]

118. Neither the language of the Executive branch restrictions nor the White Paper define a minimum unit of space segment capacity which a separate system may offer, or specify a minimum term for "long term

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[70] White Paper at 42.

[71] *See* Transponder Sales, 90 FCC 2d at 1256.

[72] *Id.* at 1257; *see* National Association of Regulatory Utility Commissioners v. FCC, 525 F.2d 630 (D.C. Cir.), *cert. denied,* 425 U.S. 999 (1976) ("NARUC I").

[73] *See* Transponder Sales, 90 FCC 2d, at 1238.

[74] We recently initiated a rulemaking looking toward adoption of an application process for those seeking status as recognized private operating agencies (RPOAs). Under that proposal, operators of the separate satellite systems would be eligible for designation as RPOAs as that term is used in the International Telecommunications Convention and the Regulations and Recommendations issued thereunder, and for membership in the International Consultative Radio Committee notwithstanding their lack of 214 authorization. *See* Intercommunication Policies Governing Designation of Recognized Private Operating Agencies, Grants of IRU's in International Facilities and Assignment of Duty Network Identification Codes, FCC 85-369, ___ FCC 2d ___ (adopted July 12, 1985).

lease" of capacity. Comsat is concerned that, absent specific definitions, a separate system operator could provide the equivalent of international MTS by selling or leasing small amounts of capacity or permitting the purchase of single voice circuits on a time-shared basis. Therefore, Comsat believes that a minimum unit of space segment capacity would be one-half transponder (18 MHz), which it contends is small enough to permit user flexibility and large enough to prevent abuse of the intent of the Executive branch restrictions. Comsat further believes that the proposed minimum lease period should be five years. IRI proposes that it should be the lifetime of the satellite. Comsat proposes that all sales and leases must be on a full-period, 24-hour, seven-day-per-week basis which would prevent time-sharing.

119. We agree with Comsat that the term "long-term lease" requires further definition. However, we believe that Comsat's proposed minimum unit of capacity and long-term lease terms are overly restrictive and unnecessary to achieve the objectives of the Executive branch proposal. We find no need to establish a minimum unit of capacity. The Executive branch restrictions clearly anticipate permitting separate system operators to offer less than full transponders. In fact, the White Paper suggests that capacity as small as a single voice-grade circuit could be offered.[75] More important, we believe that there are clear distinctions between private lines and international MTS which make it unlikely that their provision by separate system operators would lead to duplication of the MTS network, as Comsat fears. First, from an operational standpoint, private lines cannot match the MTS network where there is a need for multiple point connection. By definition, a private line will connect one point with another, while the MTS network offers on-demand connectivity to points all over the world. A private line can only achieve this result through interconnection with the MTS network which is prohibited by the Executive branch restrictions. Second, we believe that Comsat overstates the substitutability aspect of voice-grade private line circuits, even considering time sharing. Third, since INTELSAT already offers transponder capacity on 9 MHz units for IBS, INTELNET and domestic leased services, imposition of a minimum unit of capacity requirement of one-half transponder (18 MHz) as Comsat proposes would place separate system operators at a competitive disadvantage in areas the Executive branch has deemed subject to competition. This result would be contrary to the intent of the Executive branch restrictions. Finally, the minimum lease term that we will impose and require to be applied to all users of separate system

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[75] White Paper at 42 (comparing domestic and international charges for full-time, voice-grade private lines, and concluding that "a U.S. firm offering international circuits at prices comparable to U.S. domestic prices should thus experience significant demand").

capacity will by itself discourage the use of voice-grade private lines as a widespread substitute for international MTS.

120. Absent any indication from the White Paper as to how long a lease period should be permitted, we look to the purpose of the restrictions and are guided by existing commercial practices in offering satellite leases. Comsat states that a long-term lease should be for a minimum of five years. It states that sales and leases must be on a full-period, 24-hour, seven-day-per-week basis. However, we conclude that a five year minimum is longer that necessary to accomplish the objective of the Executive branch restrictions. This objective is to protect INTELSAT's "core" business by limiting competitive systems to those services which do not comprise that "core" business. It requires that customers acquire capacity on a "long-term" basis in order to assure that the capacity is tailored or "customized" for the special needs of the customer which separate satellite systems are technically designed to satisfy. We do not believe that a five-year lease term is necessary to achieve this goal.

121. First, a five year lease term would so severely limit the scope of separate satellite system operations that only very large users might consider obtaining capacity. Small users would most likely be unable to project their communications needs over the course of five years and, therefore, would not invest in separate satellite systems if a five year lease were required. The White Paper clearly describes the benefits of "customized" services to large users; however, it does not foreclose these benefits to businesses with smaller but equally important communications needs. In its reply comments, NTIA anticipates that multinational companies and heavy users would be the primary customers of separate systems, but it also speaks in more general terms such as "U.S. business users," "international business users" and "users" benefitting from separate satellite system services.[76] As long as INTELSAT's "core" business is preserved, we see no need to require minimum lease terms that would effectively prohibit smaller businesses and users with customized service needs from using separate systems.

122. Second, the proposed five year term is not supported by existing domestic satellite and INTELSAT lease terms. U.S. domestic satellite providers offer leased services variously called "long-term," "fixed-term" and "full-time" for periods extending from one to seven years with various restrictions and requirements. INTELSAT and Comsat offer leased services also at various periods of time: (1) "full-period" space segment television service (customer provides earth terminals) initially for two, five or seven years, with one or two year extensions; (2) "Improved Video Channel Service" for five years; (3) "full period" space segment television service (Comsat provides earth station) initially for two

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[76] Reply Comments of NTIA at 3, 10, 12, 13, 16, 18 and 19.

years, with extensions in multiples of one year; (4) INTELSAT Business Service (IBS) transponder capacity (full (72 MHz) ½ (36 MHz) ¼ (18 MHz) and ⅛ (9 MHz) transponder, initially for one year, with extensions in yearly multiples up to seven years; (5) domestic leased space segment capacity (full (36 MHz), ½ (18 MHz) and ¼ (9 MHz) transponder, for one year with a regular operational satellite and five years with a spare satellite; (6) INTELNET (full (72 MHz), ½ (36 MHz), ¼ (18 MHz), ⅛ (9 MHz) transponder) non-preemptible for one year and preemptible for two, five, or seven years; and (7) Integrated Video/Data service (full (72 MHz); ½ (36 MHz), ¼ (18 MHz) and ¼ (9 MHz) transponders) full time preemptible for two, five and seven years and full-time non-preemptible for one, four and seven years.[77]

123. In view of these factors, we believe that *one year* is a reasonable minimum lease period for the business data, television and domestic lease services that the applicants for separate system propose to provide. As can be seen, INTELSAT, through Comsat, offers U.S. users leased services in these areas for periods of one year. Not to permit separate system operators to offer similar leases would place them at a distinct competitive disadvantage in areas that the Executive branch has deemed desirable for competition. Thus, while separate system operators would be restricted to five year leases under Comsat's proposal, INTELSAT would offer one-year leases for IBS, INTELNET, integrated voice/data and domestic leased services. This result would be contrary to the intent of the Executive branch restrictions. Under these circumstances, we conclude that imposition of a minimum lease period of one year is consistent with the intent of the restrictions. This minimum period will of course preclude separate system operators from offering the occasional use video services that several commenters desire. While we may have reached a different result under different circumstances, we believe that we have no choice but to give effect to this facet of the Executive branch restrictions. Any period less than one year could not reasonably be considered "long-term."

124. We will apply the "no-interconnection" and "sale and long-term lease" restrictions called for by the Executive branch restrictions not only

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[77] INTELSAT also offers leased services at shorter periods of time. These services are: (1) "full time" voice grade service (4 KHz) for one month; (2) contract television service, with minimum lease periods ranging from 200 minutes per month, to 10 consecutive minutes on 5 consecutive days a week for 26 consecutive weeks, depending on the type of contract; (3) Sound Program Channel service (4-12 KHz) for one month; (4) high speed data channel service (48 Kbps - 1.544 mbps) for one month; (5) Digital Data Satellite Communications Service (DIGISAT) for one month; (6) full time INTELSAT Business Satellite Service (IBSS) for three months; (7) Rural Communications Service (4 KHz) for three months; (8) "short term" domestic leased space segment capacity (9-36 MHz) for three months; and (9) "full time" VISTA service, for three months. In addition, even shorter leases are provided by INTELSAT on an occasional use basis.

to separate system operators, but also to all levels of users of the facilities. We agree with Comsat that the restrictions must attach to the satellite facilities themselves and not just to the licensed operating company.[78] The purpose of the "no-interconnection" restriction will be defeated if users are permitted to interconnect with "public-switched message networks" because separate systems could be used to carry MTS and other switched traffic which the Executive Branch seeks to protect to avoid significant economic harm to INTELSAT.

125. In addition, there is no basis for independent Commission action to impose a sunset date on the Executive branch restrictions. The language of the restriction does not specify a sunset date and the White Paper does not discuss the possibility of such a limitation. Since the restrictions are intended to assure U.S. fulfillment of its international obligations, we will not consider removal of the restrictions absent a finding by the Executive Branch that they are no longer necessary to fulfill U.S. international obligations.

126. As to Comsat's proposals that common carriers not be permitted to obtain space segment capacity from separate systems and that the resale and shared use of capacity be prohibited, neither the language of the Executive branch restrictions nor the White Paper explicitly require these measures. Comsat believes that there is no function for common carrier purchasers or lessors to perform because carriers, like system operators, would be limited to the sale or long-term lease of non-interconnected capacity, and could not provide prices or services that could compete effectively with the underlying suppliers. Comsat therefore believes that permitting carrier investment in space segment capacity and associated ground segment would create incentives to expand the definitions of "long-term" and "no interconnection" in a manner inconsistent with U.S. obligations to INTELSAT. We disagree. First, even if carriers may have incentives for "creative expansion" of the "long-term" and "no interconnection" definitions, incentive, in and of itself, is not a public policy reason to declare carriers ineligible for separate system facilities.[79] Second, Comsat's view that carriers would have no function in

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[78] Amb. Washburn and IRI argue the Commission also should prohibit interconnection between the separate satellite systems in order to prevent "massive" bypass of the INTELSAT public-switched network through the exchange of data, facsimile and other services between two companies' private networks. However, neither the Executive branch restrictions nor the White Paper impose such a prohibition. Amb. Washburn offers no evidence that interconnected traffic between separate systems would be "massive" as he contends. The services to which he refers are not forbidden to separate systems as long as they are not interconnected to the public-switched message network.

[79] If the Commission adopted this line of reasoning in the *Comsat Study,* it would have prohibited Comsat from entering into non-INTELSAT/INMARSAT lines of business based on its findings that Comsat had both the incentive and opportunity to use its

reselling separate system capacity apparently is partly based on the assumption that they would not be permitted to break up the capacity in any way and would be required to resell it in the same form originally acquired. This assumption requires imposition of a minimum use of capacity requirement which, as we have discussed, is unnecessary to achieve the purpose of the Executive branch restrictions of protecting Comsat's "core business." Thus, we believe that carriers would have a function in reselling separate system capacity by breaking the capacity that they acquire into small units which could be tailored to the private needs of customers and that this function would be one means of achieving the benefit that we have found can be provided by separate systems. As we have noted, NTIA states in its reply comments that both carriers and users may have an opportunity to obtain capacity in the proposed systems.

127. We conclude that the Executive branch intends to permit common carrier resale of separate satellite system capacity so long as such operations comply with the "long-term lease" and "no interconnection" requirements set forth by the Executive branch. The use of separate systems by U.S. carriers would require Section 214 authorization from the Commission. That authorization would be conditioned on compliance with the Executive branch restrictions. Carrier tariffs would have to comply with the "long-term" lease requirement. In addition, we shall not preclude resale of separate system facilities by enhanced service providers as long as the foreign authorities within the countries they operate and their foreign correspondents agree to resale operations.[80] As with any other separate system user, enhanced service providers will be subject to the Executive branch "no-interconnect" and "long-term lease" restrictions.

(d) Operating Agreements

128. Finally, we reject IRI's proposal to require as a precondition for licensing of separate systems that applicants must establish a correspondent relationship. In support of its contention, IRI attempts to distinguish between applications involving the licensing of individual carriers, where

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position as the sole U.S. representative in INTELSAT and INMARSAT to engage in anticompetitive behavior. *Comsat Study,* 77 FCC 2d 564 (1980).

[80] The Commission is examining in its *International Resale* proceeding various provisions currently embodied in IRC tariffs which restrict the resale of their services by third parties. Regulatory Policies Concerning Resale and Shared Use of Common Carrier Communications Services (International Resale), 77 FCC 2d 831 (1980). Our action here permitting the resale of separate system facilities does not prejudge our decision in our *International Resale* proceeding since it does not alter existing tariff restrictions governing third party use of international services. *See* GTE-Telenet Communications Corp. (Computer II International), 91 FCC 2d 232 (1982); *reconsideration denied,* Mimeo No. FCC 8529 (released February 22, 1985).

it concedes that such a requirement might stifle competition, and those applications for licensing of facilities. IRI also cites the Commission's decision involving the application of Submarine Lightwave Cable Company for a transatlantic cable as further support for its contention.[81]

129. We find some irony in IRI's proposal in view of its own experience in attempting to enter the international communications market. In 1980, IRI's application to provide service to the United Kingdom was opposed, *inter alia,* because IRI did not have an operating agreement. Opponents argued that IRI could not be authorized because the existence of an operating agreement was a prerequisite to receiving Commission authorization.[82] The Commission rejected this contention, citing previous cases where it established that an operating agreement is not a prerequisite to receiving authorization.[83] The Commission noted that adherence to such a requirement "may inhibit our efforts to bring the benefits of competition in the international communications marketplace to consumers."[84] We find no basis for IRI's attempt to distinguish between applications involving the licensing of services and applications involving the licensing of facilities. The mere fact that a facilities application is involved does not warrant the imposition of such a requirement. The Commission determined with respect to service applications that foreign authorities might not consider entering into appropriate agreements with potential U.S. entrants for overseas termination of services if the potential U.S. entrant had yet to receive Commission authorization. Separate satellite system operators must obtain some form of agreement with foreign authorities in order to begin operations with a particular country. Clearly, the same concerns are equally applicable to facilities licensing applications.

130. Moreover, IRI's reliance on the Commission's decision involving SLC is misplaced. In considering SLC's application, the Commission initially determined that the application did not contain all of the information required by the Commission's Rules and did not meet the threshold reciprocity showing of the Cable Landing License Act or otherwise appear to be consistent with the United States interests under the Act. However, it did not state that an operating agreement would be

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[81] *In re* Tel-Optik Limited, FCC 85-99 (released April 5, 1985).

[82] *See* International Relay, Inc., 77 FCC 2d 819 (1980).

[83] *See* Graphnet Systems, Inc., 63 FCC 2d 402, 408 (1977) and 67 FCC 2d 1020, 1039-40 (1978), Communications Satellite Corporation, FCC 80-42 (released February 21, 1980), and Graphnet, Inc., Mimeo No. 30890 (released April 3, 1980). Our discretion in requiring an operating agreement was affirmed in ITT World Communications Inc. v. FCC, where the court upheld our determination that an operating agreement is not a requirement for an authorization under Section 214. *See* ITT World Communications, Inc. v. FCC, 595 F.2d 897 902-03 (1979).

[84] International Relay, Inc., *supra,* 81, 77 FCC 2d at 827.

required prior to granting a Cable Landing License. In response to these concerns SLC filed supplemental information showing the foreign landing points of the cable and indicating that it would adhere to its obligations under the Cable Landing License Act with respect to reciprocal treatment of U.S. interests. Based on these representations, SLC's application was granted and a Cable Landing License was issued without the existence of an operating agreement.[85]

(e) Enforceability of Executive Branch Restrictions

131. Having reviewed the Presidential Determination and the comments,[86] we do not believe the restrictions can be read to mean that, absent an absolute guarantee that separate system traffic will not interconnect with the public switched network, such systems would not be in the national interest. Such an interpretation, given today's technology, is to put form over substance. The connect-on-demand capability of modern PBX and similar "smart" technology give private line users the capability to route their traffic to public-switched message networks.[87] Given this technological reality, we read the restrictions to mean that this

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[85] Submarine Lightwave Cable Co., Mimeo No. 5241 (released June 19, 1985).

[86] Two signatories, Norwegian Telecommunications Administration and the Swedish Telecommunications Administration, stated that they do not believe that the "no-interconnect" restriction will be enforceable. *See* letter from Tony Hagstrom, Director General, Swedish Telecommunications Administration to Mark S. Fowler, Chairman, Federal Communications Commission (May 5, 1985). Letter from Director General, Norwegian Telecommunications Administration to Mark S. Fowler, Chairman, Federal Communications Commission (May 24, 1985).

[87] In the domestic area, we are not presented with an analogous situation, since we do not seek to prohibit interconnection of PBX's with the public switched-message network. We have defined the leaky PBX phenomenon as: "A private line subscriber's capability to patch an interstate call through a PBX to off-network destinations in the local exchange." MTS/WATS Market Structure, Second Supplemental Notice of Inquiry and Proposed Rulemaking, 77 FCC 2d 224 (1980) (Second Supplemental Notice). Because of the difficulty in detecting or measuring this leakage and in order to prevent any unreasonable discrimination in rates between MTS users and private line users, we have imposed a private line surcharge of $25 to ensure that those users responsible for leaky PBX traffic bear some share of the interstate access costs. *See* MTS/WATS Market Structure, Third Report and Order, 93 FCC 2d 241 (1983) (*Access Charge Order), modified on reconsideration,* 97 FCC 2d 682 (1983) (*First Reconsideration Order), modified on further reconsideration,* 97 FCC 2d 834 (1984) (*Second Reconsideration Order), aff'd and remanded in part, Nat'l Ass'n of Regulatory Comm'rs v. FCC,* 737 F.2d 1095 (D.C. Cir. 1984), *cert. denied,* 105 S.Ct. 1224 (1985) (*NARUC v. FCC*). Since the flat surcharge of $25 was developed under serious time constraints, we are currently seeking public comment on whether the private line surcharge should be continued, modified, deleted or replaced. MTS/WATS Market Structure, Notice of Proposed Rulemaking, 49 Fed. Reg. 50413 (Dec. 28, 1984). However, the domestic surcharge approach would not be appropriate here where we are prohibiting interconnection with public switched-message networks. The domestic surcharge is not an enforcement tool, but rather a local exchange "access charge" designed to make PBX users bear some of

Commission must assure that it takes steps to minimize interconnection such that Intelsat will not be subject to significant economic harm and, thereby, we will meet the underlying concerns and criteria of the Executive Branch "restrictions." We believe that there are means that can be taken which will strongly discourage users from abusing the system and, thus, will minimize violation of the Executive branch "no interconnect" restriction. These measures will provide a means of enforcing the restriction.

132. Pursuant to Sections 303(f) and (r) of the Communications Act, 47 U.S.C. §§ 303(f) and 303(r), the Commission may legally restrict any license it issues authorizing operation of an international satellite system that promotes the public interest.[88] In order to implement the Executive branch restrictions, we will condition the license of any separate system that we may authorize to prohibit the interconnection of these systems with the public switched message network. In addition to conditioning separate satellite system licenses, we will impose the same condition on the licenses of all earth station operators. This condition would be imposed on earth station licenses whether owned or operated by the separate satellite system operator or its customer or ultimate user. The imposition of the restriction on the earth station owners will enable us to limit any necessary remedial action to a single earth station owner/violator rather than revoking the license of the separate system operator — an action which could affect innocent parties. However our ability to focus remedial action narrowly in no way relieves the separate system operators/licensees of their ultimate responsibility to ensure through due diligence, that their systems are utilized in full compliance with the conditioned authorizations. See paragraph 135 below. Besides, given the significant investment at risk for any violation, whether penalties are applied narrowly or broadly, it is in the self interest of the separate system licensee to "enforce" strict adherence to the "no interconnect" restriction.

133. We will also require that the "no interconnect" restriction run with the use of the facilities and not be limited only to the space and ground segment licensees. In order to achieve compliance among all levels

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the interstate access costs. No commenting parties suggest that a surcharge would be an acceptable arrangement in the international area.

[88] Section 303(f) of the Communications Act, 47 U.S.C. § 303(f) states that the Commission shall "[m]ake such regulations not inconsistent with law as it may deem necessary . . . to carry out the provisions of the Act." Section 303(r) of the Communications Act, 47 U.S.C. § 303(r) states that the Commission shall "[m]ake such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this Act, or any international radio or wire communications treaty or convention, or regulations annexed thereto, including any treaty or convention insofar as it relates to the use of radio, to which the United States is or may hereafter become a party."

of separate system users, we will retain jurisdiction over the use of all separate system facilities. Since, as we have stated, the "no-interconnect" restriction will apply to communications originating in foreign countries and destined for the United States as well as communications originating in the United States destined for international points, and will continue to apply at the "foreign-end" for communications originating in the United States, we must rely upon foreign authorities to take measures to enforce the restriction. We therefore will require that all operating agreements entered into by separate system licensees with foreign authorities must contain language stating that both parties will take necessary measures to enforce the "no-interconnect" restriction. We also will require separate system operators to place the "no interconnect" restriction in all lease agreements for space segment capacity and all sales contracts for the purchase of transponders.

134. In addition, we will impose certain requirements on separate system users to foreclose opportunity for them to escape legal responsibility for adhering to the restriction. For those users which seek to resell separate system capacity on a common carrier basis, we will condition all Section 214 authorizations on compliance with the "no-interconnect" restriction and require carrier tariffs to impose the restriction on customer use of the facilities and services offered. Violation of the restrictive condition by carriers will subject them to loss of their Section 214 authority to use separate system facilities and violation of the tariff restriction by users will subject them to loss of service. We will require written agreements to be maintained between those users that seek to resell separate system capacity as enhanced service providers or to enter into sharing arrangements with other service providers and their customers and among users entering into sharing arrangements. These agreements must be filed with the Commission and contain explicit language precluding interconnection of separate system facilities to the public-switched message networks. Finally, for all those users which interconnect their separate system facilities to a PBX or similar equipment, we will require that such equipment be configured by either hardware design or through software features to block on-demand connections with public-switched message networks.[89] Each such user must file a written sworn certification by a corporate official with the Commission: (1) stating that it

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[89] For purposes of implementing the "no-interconnect" restriction, we obtain jurisdiction over enhanced service providers and end-users which seek to interconnect a PBX or similar equipment with their separate system facilities through the full panoply of authority under Title III of the Communications Act of 1934 to license and condition the use of radio facilities and pursuant to the residual authority under Title I of the Act to ensure full effectuation of our statutory mandate. We have sufficient ancilliary authority to remedy specific abuses by enhanced service providers or end-users which undermine the policies that we are adopting today. See *GTE Telenet Communications*

understands the "no-interconnect" restriction placed on all levels of use of separate system facilities and is aware of the sanctions for non-compliance; (2) giving assurances that it will comply with the restriction; (3) indicating that all concerned employees will be continually advised of the restrictions and that it will enforce strict compliance by its employees; (4) describing the technical measures to be employed to prevent "on-demand" interconnection with the public switched-message network; and (5) attesting that these technical measures will not be changed or overridden for any reason. Failure to adhere to the certificated statements would subject the user to sanctions (see, *e.g.* 18 U.S.C. § 1001) in addition to those for the underlying violations themselves (see para. 137 below). The written certifications must be filed with the Commission prior to actual use of separate system facilities. No separate system service provider, whether that service provider be the separate system licensee or a reseller, may provide service to a potential customer (if it intends to interconnect its separate system facilities with a PBX or similar equipment). All contracts between service providers and such customers and all tariffs must as a precondition to the provision of service require the customer to provide evidence that the certification has been filed with the Commission. The contracts and tariffs must also specify that violation of the "no-interconnect" restriction is grounds for immediate revocation of service. We expect all separate system service providers to use their best efforts to ensure compliance with the "no interconnect" restriction through these and other means, as may be necessary, such as contractual and tariff provisions for inspections and monitoring procedures.

135. We believe that any widespread violation by either a separate system operator or resellers would become evident because such violators would have to advertise illegal interconnect services or utilize some means to inform customers of their availability. These actions would draw attention to the activity, lead to competitor complaints and result in U.S. government or foreign authority investigations and sanctions. In addition, it is clear that self-enforcement among competing suppliers will be another means of detecting abuses.[90] Any party that has reason to believe

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Corporation (Computer II International reconsideration) Mimeo No. FCC 85-29 (released February 22, 1985) citing *CCIA v. FCC* 693 F. 2d at 211-13 (1982).

[90] INTELSAT has stated that self-enforcement is at least one way it plans to enforce its policy prohibiting users of IBS from using this all digital service to divert public-switched telephony traffic. In response to a statement that this policy would be difficult to enforce, the Director General stated to the Board of Governors that:

> It is a policy which is in the interest of all Signatories and hopefully there will be a strong element of self-policing by the individual Signatories themselves; in addition, INTELSAT is studying means to improve its capability to monitor and identify situations in which the policy is being transgressed and will assist Signatories in this regard. (BG-59-3E, H/6/84 June 1984 p. 50).

that a carrier is violating the "no interconnection" restriction may file a complaint with the Commission pursuant to Section 208 of the Communications Act. Complaints alleging violations by non-carriers and requesting Commission investigation may be filed pursuant to Sections 4(i) and 403 of the Act. However, we recognize that end-user self-enforcement may not be a useful means of detecting abuses by separate system end-users. Their diverse activities and unrelated interests would not provide them reasons for concern about system abuses by other end-users. We believe that detection of end-user abuses of the "no-interconnect" restriction first will require ongoing review of international MTS trends by the FCC as well as by competitors of the separate systems to determine whether reductions of IMTS are occurring in a manner which suggest wide-spread violation of the restriction. Isolated abuses involving small amounts of traffic will be difficult to detect.We will monitor the annual international traffic data submitted by U.S. carriers (see, *e.g.*, Section 43.61 of our Rules) for any significant reductions in the levels of traffic handled by U.S. carriers. This data can be supplemented, as may be needed, by the carriers with data showing monthly trends. A reduction in the expected growth levels in traffic volume between the United States and those countries served by separate systems would signal the possibility of widespread violations of the "no-interconnect" restriction. Furthermore, AT&T, as a competitor of the separate systems, will have an economic incentive to vigorously police potential violations. Accordingly, we expect it to monitor the situation carefully and bring to our attention any indications of significant restriction violations. AT&T can identify through its billing records decreases in IMTS use by large customers. Our certification requirements will enable us to identify whether those large customers are separate system end-users which interconnect their facili-

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Comsat has attempted to distinguish the Director General's statement by stating that INTELSAT has complete control over the IBS service and may make whatever changes are necessary to preserve that boundary. In addition, Comsat argues that, however the traffic is classified, it is all carried over the INTELSAT system. We are not persuaded by this attempted distinction. The point is not the extent of INTELSAT control over its services or the implication that the revenue shortfalls will be minimized because all of the traffic involved is carried over INTELSAT, however it may be classified. The point is that, to the extent INTELSAT wants to prohibit IBS users from connecting with the public switched-message network, it is relying on a "self-policing" mechanism to achieve this objective. Other than the broad and unexplained statement that "INTELSAT can make whatever changes are necessary to preserve the line," (Comsat reply comments at footnote 22) Comsat does not explain why a "self-policing" mechanism can be any more or less effective with separate satellite systems. Comsat's contention that INTELSAT would not have control over the operations of separate satellite systems comparable to the control that it has over its own system is irrelevant, since the U.S. government and foreign authorities will be responsible for enforcing the "no interconnect" restriction and not INTELSAT.

ties to PBX's or similar equipment. This information would provide us a basis for further investigation by both this Commission or by the separate system licensee at the request of the Commission. We then may be in a position to initiate expeditiously whatever action is required to remedy any abuses that we find.

136. Alleged violators that are subject to the Act's sanctions would include satellite operators, earth station operators and common carriers in the United States. If the Commission determines that a violation has occurred, several sanctions may be instituted against the violator. A violator may have its license revoked or be subject to a cease and desist order for willful or repeated failure to operate substantially within the license, or for willful or repeated violation of the Act, regulations, or treaties pursuant to Section 312 of the Act, 47 U.S.C. § 312. Under Section 303 of the Act, 47 U.S.C. § 303, an operator may have its license suspended for violation of laws and treaties the Commission implements.

137. The Commission also intends to avail itself of both civil and criminal remedies which it may apply to any violators (including users) of the Executive branch restrictions. Section 503(b) of the Act, 47 U.S.C. § 503(b), allows the Commission to impose monetary fines on such violators. Sections 501 and 502, 47 U.S.C. §§ 501 and 502, carry monetary penalties as well as imprisonment sanctions for the willful and knowing violation of the Communications Act or of regulations and treaties. Other sanctions such as the seizure of property under Section 510, 47 U.S.C. § 510, for the willful and knowing intent to violate Sections 301 and 302, 47 U.S.C. §§ 301 and 302, are available to the Commission for violations of the restrictions.

138. We believe that, given the measures discussed above, violations of the Executive branch "no interconnection" restriction can be minimized. As we have stated, no amount of regulatory procedures and sanctions can guarantee 100 percent compliance with the restriction or be immune to further industry evolution. We are confident, however, that these measures we have outlined will prove sufficiently effective to discourage violation of the "no interconnect" restriction. Our serious commitment to enforcement and firm intention to take forceful remedial action cannot be over emphasized.

3. Consideration of Significant Economic Harm

(a) Introduction

139. As part of its *ad hoc,* case-by-case approach to determine significant economic harm, INTELSAT evaluates the specific circumstances of each satellite system to be coordinated. INTELSAT's current procedure for determining significant economic harm was adopted by the

Board of Governors in 1977.[91] This procedure requires those members seeking to coordinate under Article XIV(d) to furnish such information as the expected date of commencement of operation and expected duration of operations of the separate space segment facilities; the types of international public telecommunications services to be provided and coverage zone(s) of the separate facilities; the identity of other INTELSAT Parties or Signatories or other entities expected to utilize the separate facilities; and the identity of all existing or projected international public telecommunications traffic or services to be provided by the separate system for the period of operation (including the identification of any such traffic or service presently contained in the INTELSAT Traffic Data Base for that period). The principal indicators in assessing economic harm are to be the impact on projected INTELSAT space segment costs and utilization charges, the effect on INTELSAT planning and operations, and the resulting impact on signatories' investment. This impact is to be measured by comparing the level of projected INTELSAT costs and utilization charges, had the service requirements been met by existing or planned INTELSAT facilities, with the projected INTELSAT costs and utilization charges, absent the service requirements being met by the INTELSAT system. INTELSAT also considers the effect a separate satellite system would have on signatory investment shares and other factors that may be relevant on a case-by-case basis.

140. Pursuant to this procedure, many factors have been considered in past Article XIV(d) consultations. Some factors have been important in more than one coordination procedure. For example, the amount of traffic likely to be diverted from the INTELSAT system was an important factor in the economic coordinations of ARABSAT, the European Communications Satellite system and its subsequent expansion, the Algerian use of Intersputnik, and the use of domestic systems for the transmission of service between the U.S. and Canada. In the case of these systems, the potential traffic diversion was determined to be small or negligible. In other coordination proceedings, some factors have been specific to the proposed satellite system. For example, PALAPA was designed to provide services between remote locations in the Philippines, Malaysia, Indonesia, Singapore, and Thailand where interconnection with the INTELSAT system would have been uneconomical. In another case involving U.S.-Bermuda TV reception, Bermuda's small size and limited economic resources were decisional factors.

141. The INTELSAT Board of Governors has been considering alternatives to the current procedures for determining significant eco-

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[91] *See* INTELSAT Document, "Intersystem Coordination Procedures for Implementation of Article XIV(d) Requirements Concerning Significant Economic Harm," BG-28-63E (June 29, 1977).

nomic harm. The Director General has proposed criteria that would consist of five basic interrelated questions that would be addressed in turn in an assessment of significant economic harm and prejudice to the establishment of direct communications links.[92] However, the criteria that would be applied to Article XIV(d) coordination requests go beyond the mere issue of economic harm, although this issue is an integral part of the coordination procedure. The first basic question is whether the services to be provided by a proposed separate satellite system are public international services. If the services are not public international services, no further coordination is required.[93] The second question is whether the proposed services can be provided by INTELSAT. If INTELSAT can provide the services, then a determination has to be made as to whether the proposed separate system is likely to prejudice the establishment of direct telecommunications links through the INTELSAT space segment among all the participants. The third question concerns ensuring mutual connectivity among all users at reasonable costs, including ground facilities, in a technically efficient manner. The fourth question focuses on the issue of economic harm. Under this criteria, if INTELSAT is providing or could provide the service that a separate system proposes to offer, then the harm inflicted on INTELSAT is identified and evaluated. The Director General identifies three factors to evaluate in order to determine harm: the amount of traffic diversion, the cap or ceiling on traffic diversion, and the impact of traffic diversion upon INTELSAT's satellite loading and deployment plans.[94] Finally, the fifth question in the proposed revised procedures involves a determination of special circumstances that may be relevant to a proposed separate system. The primary concerns with this question are transborder services and geographic coverage over short distances. Satellite communications is said to be more cost effective for longer distances, so a separate system that proposes to provide service over short distances, *e.g.*, 1500 kilometers or less, is presumed to be established for other reasons.

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[92] *See* INTELSAT Document, "Policies, Criteria and Procedures for the Evaluation of Separate Systems Under Article XIV(d)," BG-60-69E (August 22, 1984).

[93] Orion has argued in its application that it would not be providing "public telecommunications services" and therefore need not coordinate under Article XIV(d) but need only technically coordinate under Article XIV(e). We disagree. We regard the Executive branch's Memorandum of Law on Orion's contention as conclusive.

[94] The first factor, traffic diversion caused by a separate satellite system, would be determined on a service-by-service, region-by-region, and case-by-case basis as well as on an INTELSAT system wide basis. Consideration would be given as to whether or not INTELSAT could provide comparable service, whether the diversion would be "small" or "negligible," and whether the diversion would be incidental to the natural fringe of a domestic satellite system. The second factor, the cap, is concerned with the aggregate traffic diversion from INTELSAT that is caused by all separate satellite systems planned by a country for a period of ten years. The traffic that is diverted by each separate satellite system may not inflict economic harm on INTELSAT but the combined, cumulative impact caused by several systems could result in significant economic harm. In order to prevent adverse effects from being caused by more than one system, a cap is proposed to limit the economic harm any one nation could impose on INTELSAT. The cap would be set for an operational region or for individual countries and it could differ between regions or services. The third factor, satellite loading, would involve an analysis and determination as to whether a separate satellite system would result in inefficient loading of INTELSAT satellites in a region.

142. The Director General's proposal has been submitted for the record in this proceeding by parties filing informal comments and the applicants have commented on it. The Board of Governors did not adopt the proposal when it was considered at the Board's most recent meeting in June of this year, and it is considering alternative proposals submitted by other signatories. The United States has continued to support the existing procedures that provide for a case-by-case assessment which affords flexibility and an interactive environment which promotes good faith consideration of the needs and plans of INTELSAT members.[95] It does not support the adoption of any mechanistic procedures or criteria that rely on inflexible, quantitative criteria and that do not consider qualitative as well as quantitative factors.

143. Our analysis here is consistent with INTELSAT's current procedures of the economic impact of the proposed separate systems on INTELSAT as embodied in "Intersystem Coordination Procedures for Implementation of Article XIV(d) Requirements Concerning Significant Economic Harm." Further, we believe our analysis is broad enough to be consistent with any modified procedures that would continue to rely on a flexible, case-by-case approach. Our findings on significant economic harm are made as part of our regulatory consideration of the applications before us and are intended to constitute this agency's part in this country's internal process in developing a U.S. policy concerning separate satellite systems. These findings do not necessarily constitute the final U.S. view on this subject. The U.S. Government, as the Party to INTELSAT, will make the final determination as to whether it will seek coordination of any of the proposed separate systems. Of course, the INTELSAT Assembly of Parties will make the recommendation as to significant economic harm.

(b) Comments

144. In our Notice, we invited comments as to the appropriate criteria for determining whether separate satellite systems would cause economic

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[95] *See* INTELSAT Document, submitted by the U.S. Signatory, entitled "Comments on Proposals for the Establishment of Policies, Criteria and Procedures for the Evaluation of Separate Systems Under Article XIV(d) of the INTELSAT Agreement (BG-60-69)," BG-62-54 (March 22, 1984).

harm to INTELSAT and for measuring the degree of harm. We further invited comments on what constitutes "significant" economic harm. We stated that comments should focus on the language, intent and drafting history of Article XIV(d) and on technological or structural developments in the satellite market and services market which may bear on this issue. We also asked commenters to review past INTELSAT coordinations and analyze the similarities and differences between the satellite systems which were the subject of past consultations and the proposed satellite systems. In addition, we invited comments on a study on significant economic harm done for INTELSAT by Walter Hinchman Associates, Inc..

145. ISI believes that the term significant economic harm is the product of a compromise in the negotiations that led to the INTELSAT Agreements. According to ISI, the concept lacks definitive meaning and, therefore, its interpretation is a matter of policy rather than linguistics or economics. ISI argues that significant economic harm is a relative concept that depends upon an entity's overall financial health. ISI rejects the definition of economic harm proposed by INTELSAT because it claims that no separate satellite system would be able to pass the test under such a measure. In place of the definition of economic harm proposed by the Director General, ISI alleges that INTELSAT is injured when it loses traffic that is already on the system and would have been retained, or loses traffic that it planned on carrying and could be transmitted over satellites that are being constructed for INTELSAT or are under contract. ISI believes that INTELSAT is a large, financially healthy, growing organization so that significant economic harm to INTELSAT is harm "which realistically threatens the economic viability of the common enterprise."[96] Six principles are proposed by ISI to govern the economic impact consultations under Article XIV(d): (1) estimates of the economic impact that are submitted by member governments should be considered conclusive; (2) INTELSAT should take account of separate systems in its plans in order to avoid excess capacity; (3) estimates of impact should concentrate on the first five years of the proposed system's life; (4) new satellite systems should be evaluated in light of the overall situation, including new cable systems, and the likelihood of their construction and use; (5) significant economic harm should be considered only as harm which threatens INTELSAT's economic viability or its ability to carry out its global mission; and (6) significant economic harm should be assessed in light of INTELSAT's health, including its growth rates, return on capital, and accumulated surplus.

146. Orion believes that the Executive branch policy determination sets the appropriate criteria for Article XIV(d) consultation procedures.

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[96] Comments of ISI at 65.

Orion contends that there is no significant economic harm provided that new facilities and service offerings do not serve public switched needs and that such facilities and offerings do not substantially affect the properly planned and approved offerings by INTELSAT to meet those needs. Orion also contends that no formula or numerical tests should be employed to reach a determination on significant economic harm. In place of a quantitative analysis, Orion proposes four conditions, each of which must occur, for significant economic harm to ensue. First, there would be a substantial diversion of INTELSAT's primary traffic, which is switched public telecommunications, to separate satellite systems. Second, the growth in INTELSAT's primary services would have to slow significantly so that traffic growth would not compensate for the diversion to separate satellite systems. Third, INTELSAT would have to lose control over its current and future investment. Fourth, INTELSAT would have to lose control over its business and pricing practices. Orion alleges that these conditions will not exist and, therefore, separate satellite systems will not inflict significant economic harm on INTELSAT.

147. PanAmSat contends that a rigid definition of significant economic harm is not needed to carry out consultation procedures and that such a definition has not been used in the past. Instead, past determinations have been rendered on an *ad hoc* basis. PanAmSat argues that traffic diversion should be used as the basis for determinations of significant economic harm. INTELSAT's total global traffic is the proper basis to use to estimate traffic diversion, according to PanAmSat. Further, traffic diversion should be based on the services INTELSAT provides rather than the services it claims it can provide. PanAmSat also alleges that the significant economic harm concept should take into account present and future changes in the performance of the INTELSAT satellite system because any firm will argue that short-term idle capacity caused by competition results in harm.

148. RCA submits that the proper test for significant economic harm "ought to be harm that threatens INTELSAT's long-term overall viability."[97] RCA notes that the testimony of a prior INTELSAT Director General supports this approach. RCA also cites several decisions to support its definition of economic harm including a finding of the court that defines the degree of unacceptable economic harm to be that which could cause carriers to fail and thus threaten service to the public. RCA concludes that the service restrictions proposed by the Executive branch will adequately protect INTELSAT's long-term viability.

149. AT&T states that the quantitative approach to determining significant economic harm will not work and it should not be undertaken by the Commission. This kind of approach would be based on too many

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[97] RCA comments at 37.

assumptions and require too much information and data. AT&T contends that any attempt to quantify the impact of separate satellite systems on INTELSAT requires forecasts, the reliability of which is uncertain, and results that run the risk of wide error. The Commission, therefore, should adopt the "open skies" approach taken in its domestic satellite policy.

150. Comsat endorses the concept of significant economic harm developed in the study commissioned by INTELSAT. Comsat argues that the principal indicators of economic harm are the levels of projected INTELSAT costs and utilization charges that would occur if the service requirements are met by using existing or planned INTELSAT facilities, as compared to the projected INTELSAT costs and charges that would occur if the traffic is diverted to separate satellite systems. Comsat supports the idea that significant economic harm should be measured on a cumulative basis. Finally, Comsat does not believe that significant economic harm should be equated with either INTELSAT's viability or its ability to provide certain services.

(c) Review of the Hinchman Report

151. In addition to their general comments on significant economic harm, several parties to this proceeding comment on the Hinchman Report and the Director General's revised criteria. INTELSAT retained Walter Hinchman Associates, Inc. to study international satellite communications and the issue of significant economic harm. Hinchman prepared reports for INTELSAT contained in INTELSAT documents "The Economics of International Satellite Communications," Attachment No. 1 to BG-59-34E (May 18, 1984), "Significant Economic Harm," Attachment No. 1 to BG-60-63E (August 15, 1984), and "International Satellite Competition Impact Analysis," BG-62-20E (January 29, 1985). These documents have been submitted for the record by Walter R. Hinchman, as a party to this proceeding, and also by other parties filing formal and informal comments. Of particular interest to us in connection with this proceeding is the report that deals with significant economic harm. The report is concerned with the definition of economic harm and its measurement. In the report, economic harm is defined in terms of the annual unit cost of the INTELSAT space segment, and it is measured by the increase in the annual cost per unit of INTELSAT capacity that is used to provide satellite service. Specifically, the report concludes that "the most direct measure of the economic impact or harm of alternative satellite telecommunications systems on INTELSAT is the calculated effect of such systems on INTELSAT's realized cost per unit of utilized space segment capacity."[98] According to the report, an increase in INTELSAT's unit

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[98] INTELSAT Document, "Report on the Study and Significant Economic Harm," BG-60-63E, Attachment No. 1, "Significant Economic Harm," at 21 (August 15, 1984).

costs would result if new satellite systems divert traffic from INTELSAT that it has the capacity to provide or that it could provide by acquiring capacity and realizing economies of scale. The loss of traffic, it is alleged, reduces the efficiency of the INTELSAT system and increases the unit costs of the capacity that is used to provide satellite service. The report states that economic harm is best expressed in terms of the expected difference in INTELSAT's utilization charges that is caused by the traffic diversion which leads to less efficient utilization of INTELSAT's satellite capacity. The expected difference in INTELSAT's utilization charge is measured by INTELSAT's revenue requirements. In short, this report proposes to quantify economic harm by estimating INTELSAT's future revenue requirement per unit of utilized capacity before and after the expected traffic diversions that would result from the provision of service by separate satellite systems. The difference between the two estimates of revenue requirements per unit of INTELSAT space segment utilization is proposed as a measure of economic harm. The report also states that traffic diverted from INTELSAT to separate systems may have a significantly different impact on INTELSAT depending on the service, the region, or the satellite that is affected. In order to measure these differences, the report, therefore, recommends that separate estimates of economic harm should be calculated for individual services, individual satellites, groups of satellites, and geographic regions in addition to estimates of economic harm to INTELSAT as a whole. The report notes that a suitable threshold of what constitutes significant economic harm is a difficult and perhaps impossible task. It concludes that "we are unable to suggest a definitive, discrete threshold for significant economic harm that would be effective in protecting the economic viability of the INTELSAT system under all the varying situations and scenarios that could arise."[99] In place of definitive measures, the report suggests *de minimis* thresholds. In particular, it recommends a one percent limit for individual effects and a 5-10 percent limit for the cumulative effects that might result from several satellite systems. The report recommends that the limits be applied on a service-by-service, region-by-region, and facility-by-facility basis over a 5-10 year planning horizon. This measure of economic harm is quantified in terms of INTELSAT's calculated revenue requirements per unit of utilized capacity with and without traffic diversion to separate satellite systems.

152. With the exception of Comsat, the responses to the Hinchman report and the Director General's proposed, revised criteria are critical. The criticisms fall into three general subject areas: (1) the approach to defining and measuring economic harm suggested in the Hinchman report is inconsistent with past practices; (2) the definition of economic harm is

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[99] *Id.* at 29.

conceptually deficient; and (3) significant measurement problems would be encountered in attempts to measure the Hinchman concept of economic harm. We find that many of these criticisms have merit.

153. Several parties state that the Hinchman proposal and the Director General's revised criteria are inconsistent with previous coordinations involving Article XIV(d). Some parties note that potential traffic diversion has been examined to determine economic harm and others point out that special circumstances are examined on a case-by-case basis. Orion, for example, states that in previous coordinations an important consideration was the potential for diversion of large amounts of public-switched traffic INTELSAT planned to carry and had the technical capability to carry. PanAmSat states that total global satellite traffic projections have been the basis for traffic diversion analysis rather than the more disaggregated bases proposed in the Hinchman report and recommended by the Director General. It also states that the unit cost measure proposed in the Hinchman report has never been used in coordination procedures. Another criticism is that previously each coordination has been evaluated separately for its potential impact on INTELSAT and there has never been a cumulative impact criterion like the one proposed. According to Orion, the definition of economic harm and the standards used to measure it that are suggested in the Hinchman report have no foundation in the INTELSAT Agreements, their history or past practices. ISI argues that Hinchman's assumptions about traffic diversion are such that every system would cause significant economic harm. PanAmSat states that the Director General's proposal for the traffic diversion criterion, which is based on the Hinchman report, would cause significant economic harm on "any basis short of global which will allow the Director General to claim economic harm."[100]

154. The measure of economic harm proposed in the Hinchman report also has been criticized on the grounds that it has conceptual defects. Several parties note that the international telecommunications market is dynamic, growing and expanding in many directions. They claim that the measure of economic harm should recognize the dynamic nature of the market. Instead, the parties suggest that the Hinchman proposal tends to view the demand for communications services as static, and it overlooks the real possibility that entry could enlarge the market beyond current expectations by stimulating new demand, offering new services and providing service to new markets. The potential for interaction among suppliers in the marketplace, these parties claim, is not reflected in the analysis. Some parties suggest that Hinchman's analysis takes a short run perspective of INTELSAT's costs by assuming that the satellite system is fixed and unchangeable for the next several years. INTELSAT

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[100] Comments of PanAmSat at 30-1.

is assumed to be unable to change its scale of operations or to improve its efficiency in response to entry. For example, the Hinchman report's estimates of the impact of traffic diversion assume that INTELSAT's total costs, stated in terms of total revenue requirements, are constant, regardless of the level of traffic that is assumed to be diverted to separate systems. Even in this time period, however, INTELSAT has some control over its costs. It can delay launches, defer procurement of follow-on satellites, reduce other capital expenditures and reduce its operating and maintenance expenses. In fact, INTELSAT includes estimates of such cost reductions in its short term financial plans.[101] In addition, PanAmSat points out that: (1) satellites have short lives; (2) satellites can be shifted among ocean basins; (3) it is possible to redesign satellites that are already in production; and (4) plans for new, yet to be launched satellites can be changed. In contrast to the assumptions in the Hinchman analysis, these possibilities strongly suggest that INTELSAT has the ability to respond to market changes and to modify its operations and plans for the near term. But, as PanAmSat notes, the use of capacity utilization costs as the measure of economic harm assumes that investment, services and prices are unchangeable and the market is static. These assumptions are inconsistent with the realities of the international telecommunications market.

155. Orion argues that there may be welfare gains to be realized from the introduction of entry and increased competition in the international telecommunications market. These gains could take the form of new service offerings, improvements in the terms and conditions under which existing services are offered, wider choices available to consumers, lower prices and others. Orion argues that the welfare gains may outweigh any advantages that may be realized from continued reliance on a single firm to provide international service. However, the definition of economic harm proposed in the Hinchman report does not allow for potential welfare gains and does not compare them with potential welfare losses. Indeed, it could be argued that the Hinchman report, rather than showing the economic harm that might be caused from entry by separate satellite systems, shows the loss in economic welfare that has been imposed on users of the system in the past and apparently will continue in the future. The Hinchman study estimates that the INTELSAT space segment was operated at about 30 percent of its available capacity during the period 1981-1983.[102] Further, the ratio of utilized capacity to available capacity in

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[101] *See* INTELSAT Document, "INTELSAT Five-Year Financial Plan 1982-1986," BG-48-19E (November 19, 1981).

[102] *See* INTELSAT Document, "Final Report on the Study of the Economics of International Satellite Communications," Attachment No. 1, "The Economics of International Satellite Communications," BG-59-34E, (May 18, 1984) at 48.

the INTELSAT space segment is shown to decline substantially throughout the 1980's.[103] The costs of unused capacity are borne by the owners and users of the INTELSAT system and they are ultimately included in rates charged to international communications consumers. Prices that reflect large amounts of unused capacity restrict consumer demand and reduce economic welfare. Conversely, lower levels of unused capacity provide the basis for lower space segment charges and, ultimately, lower consumer rates which enhance economic welfare. Thus, there may be significant welfare losses caused by the inefficient utilization of the space segment. As several commenters have stated, the unused capacity is caused, in part, by INTELSAT's inaccurate forecasts and over-investment in the satellites.

156. Another criticism of the measure of economic harm proposed in the Hinchman report is that there are no standards, benchmarks, or criteria advanced in the report that can be used to distinguish economic harm from significant economic harm. Percentage limits are proposed in the report, *e.g.* a one percent limit for individual effects and a 5-10 percent limit for cumulative effects, applied on a service-by-service, region-by-region, and facility-by-facility basis for a 5-10 year planning horizon. However, these limits have no foundation or basis, they are arbitrary. The lack of a rational basis for distinguishing between economic harm and significant economic harm under the Hinchman proposal may help explain the absence of unit cost measures from the criteria recently proposed by the Director General for Article XIV(d) evaluation.[104] The Director General, in his review and analysis of the criteria used in the past to evaluate separate satellite systems being coordinated under Article XIV(d), proposed a detailed set of revised criteria to be used in connection with Article XIV(d) analysis. In the Director General's report, there is no mention of the Hinchman proposal to use revenue requirement per unit of utilized capacity, or any variant of unit cost, as measures of significant economic harm. In connection with the limits proposed in the Hinchman report, ISI argues that the cumulative impact criterion is discriminatory against newer systems, and it unrealistically assumes that the total impact on INTELSAT is equal to the sum of the individual impacts.

157. The third general area of criticism of the Hinchman proposal involves the difficulty in developing accurate and reliable estimates of economic harm proposed in the report. Several commenters have identified substantial measurement problems that would be encountered in attempts to estimate the economic harm that may be caused by separate satellite systems. The data and information that would be needed to

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[103] *Id.*, at 30.

[104] *See* INTELSAT Document, "Policies, Criteria and Procedures for the Evaluation of Separate Systems Under Article XIV(d)," BG-60-69E, (August 22, 1984).

estimate accurately the Hinchman concept are formidable, as we noted in our Notice.[105] As PanAmSat emphasizes in its comments, the specific data relating to INTELSAT traffic and space segment costs are held only by INTELSAT. PanAmSat claims that these data and information are not readily available to parties who might want to attempt to estimate the economic impact of entry by a separate satellite system. Several parties, including Orion, also note that INTELSAT has not demonstrated an ability to estimate demand with a high degree of accuracy. The parties point to consistent overestimates of demand and argue that estimates of diversion will not be reliable and that INTELSAT's charges will be higher than they would be with accurate projections. Orion also argues that changes in capacity cost figures and these figures themselves may be influenced by several different factors like managerial errors, forecasting errors, over-investments, entry and market interactions.[106] In order to identify economic harm that is caused by entry, therefore, the impact of entry on INTELSAT's unit costs must be identified separately from all other factors that may cause a change in INTELSAT's unit costs. Then, the net quantitative impact of entry has to be identified.

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[105] Comsat argues that the information requirements are not as formidable as they seem from the discussion in the Notice. Comsat refers to an appendix in its Comments which has a mathematical relationship between changes in unit costs and traffic diversion. Comsat's solution to the information requirement problem is to take Hinchman's revenue requirement as given for the various levels of traffic diversion that are assumed to occur and then compute a mathematical equation. In its appendix, Comsat's starting point is to assume that the total revenue requirement in the Hinchman analysis is correct and that this figure does not change as assumptions and scenarios change. Then, Comsat derives its equation. Calculating the revenue requirement estimate is complex, fraught with assumptions, and requiring a lot of data and information about satellite investment costs, operating costs, launch costs, launch successes and failures, opportunity costs of capital, and so on. Further, it is not realistic to assume, as Comsat and the Hinchman analysis assume, that the total revenue requirement estimate will remain unchanged as the scenarios change in significant ways. We attempted to identify some of the information problems in the *Notice*, and we are still convinced that there are formidable information requirements to the Hinchman approach, Comsat's arguments notwithstanding.

[106] In addition to these concerns, we have discovered a serious inconsistency in the Hinchman analysis between the total revenue requirement of a satellite and its annual cost per utilized transponder. Logically, a satellite's total revenue requirement should be greater than its annual cost per utilized transponder. This is not always the case in the Hinchman analysis. For example, throughout most of the analysis, the satellite identified as satellite 403 has an annual cost per utilized transponder that exceeds its total revenue requirement. In one instance, there is a substantial difference between the annual transponder cost estimate and the total revenue requirement, $38,441,799 for the annual cost per utilized transponder versus $5,606,096 for the total revenue requirement of the satellite. The same discrepancy arises with satellite 407 which, in one scenario, has a total revenue requirement of $2,893,275 and an annual cost per utilized transponder of $17,359,651. In another scenario, the analysis shows that satellite 412 has a total revenue requirement of $1,062,476 and an annual cost per transponder utilized $2,217,340. The report has no explanation for these inconsistencies which raise serious questions about the validity of the entire cost analysis contained in the Hinchman report on significant economic harm. *See* Attachment No. 2 to "Significant Economic Harm," at 12-17, 20, 22, 24, 26, 28, 30, 32.

158. Our analysis of the definition and measurement of economic harm that are proposed in the Hinchman report and our review of the comments submitted in this proceeding lead us to conclude that revenue requirements per unit of utilized capacity are not a reasonable measure of economic harm. The definition has conceptual shortcomings and implementation problems. Further, no sound rationale has been proposed in the report that can be used to distinguish significant economic harm from economic harm. The percentage limits that are suggested for individual and cumulative effects are arbitrary. Further, the Hinchman report does not present a well-reasoned basis or any other convincing rationale to justify its assertion that economic harm should be determined on a region-by-region, service-by-service or satellite-by-satellite basis. Since INTELSAT was established to provide global satellite service, and because it operates on a global basis, we are not persuaded by the suggestion that economic harm should be determined on a region-by-region, service-by-service or satellite-by-satellite basis. The impact of entry on INTELSAT's overall operations is the appropriate basis to use in order to evaluate the degree of economic harm that might be caused by the entry of separate satellite systems into the international telecommunications market. Finally, the reasons for the cumulative impact criterion proposed in the Hinchman report are not supported, and no sound basis is given to determine the level of the cumulative impact that results in significant economic harm.

(d) General Conception of Economic Harm

159. Some parties to this proceeding have stated that INTELSAT would not suffer significant economic harm unless its economic viability is threatened. ISI, for example, defines significant economic harm in terms of economic viability. ISI, however, does not define the meaning of the term "economic viability" and we are not aware of any commonly accepted definition of the term. An examination of *The McGraw-Hill Dictionary of Modern Economics*[107] and *Economics Dictionary*[108] did not result in a definition of the term. The concept of economic viability may differ with the circumstances of an organization. For example, economic theory suggests that in the short run, a period of time when a firm's operations are fixed by the level of its capital investment, a firm

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[107] *The McGraw-Hill Dictionary of Modern Economics*, Second Edition, McGraw-Hill Book Company, 1973.

[108] *Economics Dictionary* by D.W. Moffat, Elsevier, 1976.

should remain in business if it earns revenues that cover all of its variable costs and some of its fixed costs. According to this theory, the firm's fixed costs have already been incurred and they cannot be avoided by going out of business. So, if a firm covers its variable costs and some of its fixed costs, it should stay in business even though the revenues it earns are not enough to meet all of its financial obligations. This theory seems to suggest that a firm is economically viable and should stay in business in the short run as long as its revenues cover its variable costs. If a firm's revenues fall below its variable costs, then it suffers significant economic harm.

160. Economic theory suggests that, in the long run, economic viability depends on a firm's total costs. In the long run, a firm can change the scale of its operations and build the most efficient size to meet its anticipated level of demand. All of the firm's costs are variable and it must earn revenues to cover all its costs, including a return on invested capital that is equal to its opportunity cost, which is the return the capital would earn in its next best alternative use. Otherwise the firm would not be able to attract capital and pay for other resources and, as a result, it would not be able to stay in business. This theory seems to suggest that a firm is economically viable in the long run if its revenues cover its total costs, including a return on invested capital. If a firm's revenues fall short of its total costs, then it suffers significant economic harm and its future may be in jeopardy.

161. Break-even analysis provides another possible definition of economic viability. This short run analysis compares total revenues and total costs for different levels of output in order to determine the level of output at which revenues and costs are equal.[109] The analysis suggests that economic viability is defined by comparing total revenues with total costs, and significant economic harm occurs at output levels below the break-even point.

162. These concepts of economic viability, as measures of significant economic harm, seem to be based on a firm's ability to remain in business. Significant economic harm does not arise unless a firm's very existence is threatened. Such a definition seems to be appropriate in many sectors of the economy, but in the case of INTELSAT, which is affected by public interest as well as national interest considerations, economic viability may not be an acceptable measure of significant economic harm. Economic viability, as we have interpreted the concept, does not seem to comport with signatories' deliberations on the issues. We believe that the signatories intended significant economic harm to mean something less severe

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[109] *See, e.g., Managerial Economics* by Joel Dean, Prentice Hall, 1951, pp. 326-341 and *Price Theory and Its Uses,* (4th ed.) by Donald S. Watson and Mary A. Holman, Houghton Mifflin Co., 1977, pp. 186-187.

than a threat to INTELSAT's continued operation. As ISI notes in its comments, " 'significant' must mean something more than 'any' or 'trivial,' and may mean less than 'disabling, incapacitating, or critical.' "[110] We reason that significant economic harm is intended to denote a degree of harm which is less severe than harm threatening INTELSAT's very existence. However, we do not believe that INTELSAT necessarily suffers significant economic harm whenever its revenues fall below the level it might have realized if it was the only satellite system providing international telecommunications satellite service.

163. In general, the concept of "economic harm" is best understood in terms of the relationship between an organization's revenues and its costs. In order for an organization to attract capital and other resources for its use, it must earn sufficient revenues to cover its costs, including a return on its capital investment. In the long run, this means that an efficiently operated entity does not experience economic harm if the revenues it expects to earn from its overall operations will cover its operating and maintenance expenses, administrative and overhead costs, amortization and depreciation expenses, and earn a return on invested capital that is equal to its opportunity cost of capital. If an organization's expected revenues do not meet all of its costs (including opportunity costs on its invested capital) in the long run, we believe that the organization has sustained economic harm. At this level of business, expected revenues are not sufficient to cover the organization's costs and enable it to pay a return on capital equal to the return those funds could earn if they are invested in other alternatives that have comparable risk. Thus, the organization may experience difficulty in attracting capital that is needed to finance its investment in plant and equipment.

164. We believe that significant economic harm results when expected revenues from an organization's overall operations in the long run cover a part of its costs, but are inadequate to pay a return on invested capital that is equal to or greater than the risk-free rate of return. In this situation, an entity's revenues are sufficient to meet a portion of its costs but it is unable to pay a return on investment that is as much as an investor could earn on a risk-free investment. Under these conditions, an organization will experience difficulty in continuing to attract the capital that it needs to finance long-term investment expenditures. Hence, economic harm encompasses a range. If an organization's expected revenues cover its expected costs, including a return on invested capital that equals or exceeds its opportunity cost, the organization suffers no economic harm. If the expected rate of return is greater than the risk-free rate of return but less than the opportunity cost of capital, then the organization experiences economic harm but not significant economic

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[110] Comments of ISI at 48.

harm. However, if expected revenues meet expected costs, but are not sufficient to pay a risk free rate of return on invested capital, then economic harm exists which may be considered significant.

165. We believe that this conception of significant economic harm is a better measure of INTELSAT's financial well-being than other concepts that have been proposed in this proceeding, such as unit cost measures that are based on a region-by-region, service-by-service, or facility-by-facility basis. We also think that this conception of significant economic harm offers a better approach to quantifying the potential impact of entry on INTELSAT than does a unit cost measure. The unit cost measure simply ignores INTELSAT's revenues or even its total costs. If unit costs incurred to provide a particular service increase, for example, then this measure concludes that INTELSAT has suffered economic harm. However, the increase in the unit cost may be accompanied by an increase in INTELSAT's net revenues, and such an increase does not seem consistent with a finding of significant economic harm. The increase in net revenues could result from several factors including growth in demand, improvements in efficiency, the introduction of new services or the development of new markets. The concept of significant economic harm that we have discussed provides for a determination of the net effect of the various interrelated factors that can change total revenues, total costs and the difference between the two.

166. We are fully aware of the financial arrangements that have been established by INTELSAT to account for the somewhat unusual characteristics of the organization. Consideration of the concept of economic harm in this proceeding must take into account the nature of INTELSAT as an economic organization and the peculiarities of its operations. INTELSAT signatories, as satellite system owners, make capital contributions to finance investment much like common stock owners in a private corporation. Ownership in INTELSAT, however, is generally based on relative use of the satellite system, which is adjusted on an annual basis to reflect actual use. As users of the satellite system, signatories pay a utilization charge to lease satellite circuits that are used to provide communications services to consumers. In addition, non-owner users of the satellite system pay utilization charges to lease circuits and provide service. The revenues generated from the provision of INTELSAT services to owners and non-owners are used to meet INTELSAT's operating expenses and depreciation expenses, and to compensate owners for their capital investment. The unusual situation in the case of INTELSAT, which distinguishes the organization from a private corporation, is that the owners are, with some exception, the users of the system. Thus, we realize that INTELSAT is a consortium whose owners have joined together to provide global satellite services to themselves and that

its ownership and financial arrangements differ from those of a private corporation.

167. At the same time, however, INTELSAT's business procedures are like those practiced by a privately owned regulated utility. The INTELSAT Operating Agreement provides, in part, that INTELSAT space segment utilization charges "shall have the objective of covering the operating maintenance and administrative costs of INTELSAT, the provision of such operating funds as the Board of Governors may determine to be necessary, the amortization of investment made by Signatories in INTELSAT and compensation for use of the capital of Signatories."[111] Article 8(a) establishes that an essential financial objective of INTELSAT is to set rates for the satellite services it offers at a level sufficient to earn revenues to meet its costs and compensate its owners, *i.e.*, signatories, for their capital contributions. To do this, INTELSAT computes a revenue requirement which is composed of its operating expenses, overhead costs, annual depreciation and amortization charges and a return component. Rates for INTELSAT's satellite services are set to generate revenues that will equal its estimated revenue requirement. This procedure is identical to the one used by a privately owned, regulated utility, *e.g.*, Comsat, to set its rates. The main difference is that a regulated utility identifies its return component as a rate of return on investment while INTELSAT calls it "compensation for use of funds." The function of the return component, however, is the same in both cases, *i.e.*, to attract capital and to compensate investors for the use of their funds. Thus, INTELSAT's rates are set to cover its costs, including a return on invested capital. INTELSAT's rates, in the form of utilization charges, are cost based and, therefore, a reasonable measure of the costs INTELSAT incurs to provide satellite service. The revenues INTELSAT earns are intended to cover its total costs, including compensation on invested capital. In short, we believe INTELSAT operates its satellite system and sets rates for its satellite services in the manner of a privately owned, regulated public utility which has revenue and rate of return objectives. Notwithstanding the differences between INTELSAT's financial arrangements and those of a privately owned, regulated public utility, we believe that the comparison of INTELSAT's revenues from satellite service to the costs it incurs to provide the service is a reasonable basis for assessing the potential for significant economic harm.

168. To render a determination of significant economic harm as we have discussed the term, however, INTELSAT's future revenues and costs have to be estimated. Future revenues and costs are difficult to forecast even in a market where entry by new firms is not anticipated.

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[111] INTELSAT Intergovernmental Agreement, Article 8(a), August 20, 1971, 23, U.S.T. 3813, 4091, TIAS No. 7532.

Potential entry by separate satellite systems and the dynamic interdependency that could result from several suppliers offering satellite services only add to the complexity and difficulty of forecasting future revenues and costs. Estimates for the values of several variables that influence INTELSAT's revenues would be needed. For example, INTELSAT's rates would have to be estimated, the demand for INTELSAT's services would have to be estimated, the demand for services by final users would have to be estimated because satellite circuits are used to provide these services, and the price elasticities of consumer services would have to be estimated. In addition, assumptions would have to be made on INTELSAT's response to entry, INTELSAT's pricing and service strategies, and decisions by service providers such as common carriers to change or not to change their prices if satellite rates change. Similarly, in order to estimate INTELSAT's costs, one must make assumptions about changes in satellite segment planning, cost elasticities, efficiency improvements, the costs of other resources used to provide satellite service, and money market conditions in the future. Even if INTELSAT's revenues and costs could be estimated, the forecasted values would tend to be uncertain and the results may not have the reliability needed to reach policy decisions. Also, there is a potential for substantial variation in the results depending on the assumptions that must be made for many key variables. For the conditions that exist in this proceeding, we agree with AT&T that "there are too many important assumptions that have to be made about too many variable factors for quantification to be a useful tool for analysis."[112] With the problems and uncertainties that are inherent in developing revenue and cost forecasts of INTELSAT operations, we do not believe that precise estimates of significant economic harm to INTELSAT caused by separate systems readily would have the reliability needed to reach public policy determinations in this proceeding.

169. Thus, although we believe that our conception of significant economic harm is a better quantitative approach than the unit cost measure that has been proposed, we are also aware of the difficulties that would be encountered in attempting to develop estimates of INTELSAT's revenues and costs that have the degree of reliability we feel is needed for making decisions in this proceeding. Fortunately, precise, quantitative estimates of the possible harm to INTELSAT that might be caused by the entry of separate systems are unnecessary to reach a determination on whether significant economic harm to INTELSAT is threatened by such entry. As we shall now demonstrate, INTELSAT's satellite services produce a substantial level of revenues, INTELSAT has realized a more than adequate return on invested capital and its services offer the potential for significant growth. Further, separate systems are restricted

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[112] Comment of AT&T at 10.

to providing services which are only a small fraction of INTELSAT's market. Therefore, we do not believe that the entry of separate systems could prevent INTELSAT from earning sufficient revenues on the services it supplies to cover its costs of providing those services, including a reasonable rate of return on its net investment in capital equipment. Thus, we conclude that entry by separate satellite systems will not cause significant economic harm.

(e) Significant Economic Harm in this Proceeding

170. The most reasonable approach we can use to evaluate the potential impact of separate satellite systems on INTELSAT is to examine several economic and financial variables in order to reach a reasoned judgment on the effect entry will have on INTELSAT's financial condition. No single indicator or threshold value of a particular variable could reasonably indicate whether the degree of economic harm would be significant. As we have noted, the problems inherent in developing reliable estimates of INTELSAT's costs and revenues when potential entry exists make the application of our conceptual measure a difficult exercise. Rather than attempt to implement the concept, we believe our purposes will be served and our objectives met by examining several factors that will affect INTELSAT's revenues and costs.

171. The first factors that we will discuss are INTELSAT's financial well being and growth opportunities. The potential impact of entry on an enterprise is, after all, influenced by its overall financial condition and the nature of the market it serves. A robust, financially strong organization that provides service in a large and growing market is better able to respond to entry than is a weak financial entity that serves a shrinking market. Second, we shall discuss the relative importance to INTELSAT of the switched and non-switched service markets. This discussion is relevant in light of the President's determination that the authorization of separate systems is in the national interest if these systems are restricted to providing services through the sale or long-term lease of transponder or space segment capacity for communications not interconnected with the public-switched message networks. The existence of barriers to entry such as the Executive branch restrictions is another factor in ascertaining the impact that entry would have upon an established enterprise like INTELSAT. Finally, after determining the nature of INTELSAT's market in the absence of entry and the proportion of this market which would be opened to entry by the implementation of the Executive branch restrictions, we will then introduce entry into the analysis in order to determine its potential impact on the economic status of INTELSAT. We believe that a study of thes factors will enable us to ascertain conclusively, if only

qualitatively, whether or not the authorization of separate satellite systems would threaten INTELSAT with significant economic harm.

172. *INTELSAT's Growth Opportunities.* INTELSAT has experienced dramatic growth in its relatively short history and the market in which it operates has expanded rapidly during that time. There are no figures readily available on the total size of the international telecommunications market but, based on U.S. experience, it is reasonable to conclude that the market generates several billion dollars in revenues annually and that it is expanding rapidly. As an indication of the size and growth of the international telecommunications market, we note that the revenues earned by U.S. international common carriers reporting to us amounted to $2.4 billion in 1983. These revenues represent a tripling from the $823.0 million earned by the carriers in 1974.[113] In comparison, INTELSAT's revenues grew more rapidly than those of the U.S. international common carriers. During the period 1974-1984, INTELSAT's total revenues grew from $101 million to $411 million.[114] Thus, INTELSAT's revenues grew at an annual compound rate of 15.1 percent while those of U.S. international common carriers grew at a rate of 11.3 percent. Growth in INTELSAT's individual services reflects its overall revenue growth during the period. For example, TV half channel hours grew from 7,361 to 49,141, billable minutes of SPADE (single channel per carrier pulse code modulation multiple access demand assigned equipment) grew from 3,439,375 to 46,056,342, single channel per carrier (SCPC) circuits grew from 11 to 1,723, and full-time units of utilization grew from 11,507 to 72,461.[115] Other measures of INTELSAT's operations support this picture of rapid growth. The number of countries served by INTELSAT increased from 94 to 163 during the period and the number of earth station antennas increased from 104 to 831.[116] INTELSAT's space segment plant also grew substantially during this time. Its net investment in the space segment expanded from $291,358,000 in 1974 to $1,534,495,000 in 1984.[117] Finally, INTELSAT's cumulative rate of return on invested capital at the end of May 1985 was 15.3 percent.[118] This figure measures INTELSAT's annual return on a cumulative basis since 1973. INTELSAT's stated financial objective is to earn an annual return of 14 percent. Thus, since 1974, INTELSAT has exceeded its financial objective by 1.3 percentage points. Stated in terms of dollars, this differential represents a cumulative return of $109.9 million in excess of 14 percent.

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[113] Statistics of Communications Common Carriers, Tables 14 and 25.

[114] INTELSAT Report 1984-1985 at 32.

[115] *Id.* at 12-13.

[116] *Id.* at 12-13.

[117] *Id.* at 12-13.

[118] INTELSAT Document, "INTELSAT Financial Status as of 31 May 1985," BG-64-6E, (July 10, 1985).

This rate of return was realized while INTELSAT's annual space segment utilization charge was dropping from $9,000 in 1974 to the current level of $4,680. By all of these measures, INTELSAT has been successful.

173. We have also reviewed INTELSAT's most recent traffic data base, which is its forecast of satellite system traffic through 1998, in order to ascertain INTELSAT's prospects for continued growth in the future. Our analysis leads us to conclude that INTELSAT appears to be anticipating substantial growth in the demand for its satellite services well into the future. INTELSAT projects the global demand for full-time units of utilization for its conventional services, which include voice, record, AVD, and data services, to grow from 95,070 half circuits by the end of 1985 to 309,964 by the end of 1998.[119] This represents a compound growth rate of 9.5 percent per year, which is less than the percentage growth rates experienced in the past but greater than past growth in terms of the numerical increase in the demand for half circuits. The projected growth rate declines from 12.4 percent in 1985-1986 to 8.6 percent in 1997-1998, but growth in the demand for half circuits increases from 11,818 in 1985-1986 to 24,492 in 1997-1998. INTELSAT also projects substantial increases in the demand for the other services it plans to offer. For example, VISTA, a service that can be used for voice communications or low-speed data applications to rural and remote communities, is projected to grow from 78 circuits in 1985 to 2,516 in 1998. This represents a compound annual growth rate of 30.6 percent. Another example is IBS which is a high-quality, integrated, digital service that is offered on a full-time and a part-time basis at speeds ranging from 64 Kbps to 2.048 Mops. For the full-time service, demand is expected to increase from approximately 2,829 unidirectional circuits in 1985 to approximately 11,357 in1990.[120] (Forecasts beyond 1990 are not included in the traffic data base.) This represents a compound annual growth rate of 32.1 percent. These forecasts include a major portion of the international telecommunications market, in addition to its full-time services but INTELSAT will offer other services like TV, transponder leases, and occasional-use.

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[119] The INTELSAT Traffic Data Base Resulting from the 1984 Global Traffic Meeting, August 13, 1984.

[120] Forecasts for IBS full-time service are stated in terms of bits per second in the INTELSAT traffic data base. In order to state IBS full-time service forecasts on a comparable basis with other full-time service forecasts and, ultimately, to combine individual service forecasts, we converted the IBS figures to units of utilization by using the following factors:

56/64 kbps = 5 units of utilization
128 kbps = 10 units of utilization
256 kbps = 20 units of utilization
1.544 kbps = 24 units of utilization
2.048 kbps = 32 units of utilization

Further, since the INTELSAT traffic data base does not include traffic planned for transmission over the worldwide network of submarine cable systems, the potential market for international service is much larger than the satellite circuit forecasts.

174. We realize that the very nature of forecasts makes them uncertain and subject to error. Nevertheless, INTELSAT's own forecasts are the best indicators that are available on INTELSAT's expectations of the future demand for its satellite services. In the past, the forecasts contained in the traffic data base have had a tendency to be higher than the levels of traffic that actually materialized. As an indication of the steps INTELSAT is taking to remedy this problem, we note that the Director General has expressed his concern with accuracy in forecasting and the need to improve that accuracy in the future.[121] To the extent the suggestions made by the Director General are reflected in INTELSAT's forecasts, there will be a tendency for the projections to be more accurate. Even taking account of possible errors, however, there has been substantial growth in the demand for satellite circuits. Hence, we believe that it is reasonable to conclude that INTELSAT's traffic projections, which show the demand for conventional satellite services increasing from 95,070 in 1985 to 309,964 in 1988, demonstrate substantial opportunities for continued growth. We note specifically that most of this growth is expected to occur in full-time units of utilization that are used to provide services like record, AVD, data and, particularly, voice. The expected growth in the demand for satellite services that is demonstrated by these circuit projections should insure INTELSAT's continued growth and contribute substantially to its financial success.

175. *Relative Importance of Switched and Non-switched Services.* The discussion of INTELSAT's traffic data base shows trends and forecasts in broad aggregated estimates of future demand levels. Disaggregated data are more relevant and useful to an assessment of the potential for significant economic harm under the circumstances involved in this proceeding. The restrictions on entrants to providing services through the sale or long-term lease of transponders that are not interconnected with the public-switched message networks will have a significant impact on INTELSAT's business because, historically, most of INTELSAT's revenues have been derived from full-time international voice service. In 1984, for example, INTELSAT reported that 72.5 percent of its total revenues came from units of utilization that were leased to provide full-time international voice service.[122] This figure understates

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[121] *See* INTELSAT Document, "Improving the Accuracy of INTELSAT Traffic Forecasting," BG-59-38E, (May 17, 1984).

[122] INTELSAT Report 1984-1985 at 32.

the restriction's full impact because revenues from other services to which the restriction applies are not identified in the INTELSAT Report.

176. Each of the separate satellite systems is planned to provide service in the Atlantic Ocean Region. With the exception of PanAmSat and Finansat, the proposed satellite systems would concentrate all of their efforts on providing communications services between the U.S. and Europe. INTELSAT records show that service in the Atlantic Ocean Region accounted for revenues amounting to $258,242,541 in 1984. This figure represents 63.7 percent of INTELSAT's global revenues which totalled $405,118,190 in 1984. In the Atlantic Region, 80.8 percent or $208,568,380 of INTELSAT's revenues were derived from full-time service in 1984. Other services provided by INTELSAT in this region that generated revenues in 1984 included the INMARSAT lease (1.4 percent), SPADE (1.0 percent), occasional TV service (4.0 percent), business services (0.06 percent), circuit restoration (0.2 percent), domestic transponder leases (11.3 percent), international TV transponder leases (1.1 percent), and other occasional service (0.2 percent).[123] Thus, a major portion of INTELSAT's revenues from units of utilization in the Atlantic Region were derived from full-time service in 1984.

177. In order to develop an estimate of the revenues earned by INTELSAT in 1984 that would not be included in the service restrictions under our conception of those restrictions, we examined additional information. The estimate is not intended to establish a critical or threshold value of any kind. Since the separate systems under consideration in this proceeding are proposed mainly for service in the Atlantic region, our analysis concentrates on this area. We estimated the revenues that INTELSAT earned in 1984 from service it provided in the Atlantic region that would not have fallen within the service restrictions. We found that two percent of INTELSAT's total revenues were derived from services that could have been provided by separate systems if the service restrictions had been in effect. To develop the estimate, we first identified INTELSAT's total satellite utilization revenues in 1984. These revenues amounted to $405,118,190. Domestic transponder leases accounted for $37,651,410, but these revenues are excluded from our analysis because Article XIV(d) is concerned with international telecommunications service. Revenues earned from other services provided by INTELSAT in the Atlantic region included leases for international TV, occasional TV, circuit restoration, other occasional services, business services, full-time units of utilization, SPADE, and the INMARSAT lease. Under the service restrictions that we are imposing in this order, transponder leases for international TV service that meet the minimum time period requirement, circuit

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[123] *See* INTELSAT Document, "INTELSAT Financial Statements for Year Ended 31 December 1984," Attachment No. 1, BG-62-13E, (February 11, 1985).

restoration service, business services that meet the minimum time period requirement, and full-time units of utilization that meet the minimum time period requirement and are used to provide services that are not interconnected with the public switched network could be supplied by separate satellite systems. Thus, revenues that INTELSAT earned from the INMARSAT lease, SPADE, occasional TV service, and other occasional service are excluded from our estimate. In the case of revenues from full-time service, INTELSAT's records do not distinguish between revenues that are earned from circuits used to provide exchange service and revenues that are earned from circuits used to provide private line service. To overcome this problem, information contained in U.S. common carriers' circuit status reports was used to estimate INTELSAT's revenues from full-time units that were used by common carriers to provide private line voice service and AVD service.[124] First, private line and AVD circuits between the U.S. and Europe on satellite facilities were determined from the circuit status reports. The number of circuits was converted to half circuits and then divided by the total Atlantic region full-time satellite half circuits in service at the end of 1984. Then the resulting percentage figure was multipled by INTELSAT's revenues from full-time service in the Atlantic region. The resulting estimate of INTELSAT's revenues that were derived from full-time circuits that were used by U.S. common carriers to provide private line voice service and AVD service between the U.S. and Europe was $3,710,313. We were unable to determine the private line and AVD circuits that met the minimum time period restrictions and, therefore, the corresponding revenues. We, therefore, assumed that the entire revenue estimate fell outside the bounds of the restriction. Since we think it is reasonable to assume that some, perhaps most, of these revenues were earned from service that does not meet the minimum time period restriction, we believe that our estimate of the revenues earned by INTELSAT in 1984 that would not be included in our service restrictions is overstated. For the remaining revenue categories identified by INTELSAT (including international TV transponder leases, circuit restoration, and business services), we assumed that all of the revenues, which amounted to $3,693,805 in 1984 for the Atlantic region, were derived from satellite service between the U.S. and Europe. Here again, the minimum time period requirement may not be satisfied in some cases so including all of the revenues in our estimate may result in an overstatement. Information on transponder leases indicates that our assumption about service between the U.S. and Europe is reasonably accurate. International TV leases accounted for 80.0 percent of the $3.7 million. We found no information that enabled us to estimate the U.S.-Europe portion of the revenues derived from the remaining service categories or that allowed us to determine whether the minimum time period requirement was satisfied. Therefore, we assumed that all of the revenues from these service categories were derived from the U.S.-Europe route and met the minimum time period requirement. Once more, these assumptions may overstate our estimate. Combining the individual figures, our estimate of INTELSAT's revenues that were derived from services between the U.S. and Europe in 1984 that are not subject to the service restrictions is $7,404,118. INTELSAT's total revenues in 1984, excluding revenues from domestic satellite service, amounted to $367,466,780. Hence, at most only 2.0 percent of INTELSAT's revenues would have been accessible to separate satellite systems.[125]

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[124] A small number of satellite circuits used to provide leased channel record services were not included in the estimates because they could not be identified for all carriers. This omission does not affect the reliability of the estimates because it is minor. For example, one carrier reported that 91 telegraph grade channels out of a total of 246 voice grade satellite circuits were used to provide leased record service.

178. Historically, international message telephone service (IMTS) has been the largest source of revenues in international communications and has experienced rapid growth. INTELSAT has benefitted substantially from IMTS growth as an increasing number of satellite circuits are used to meet the expanding demand for global telephone service. Total IMTS revenues (excluding service to Mexico and Canada) earned by U.S. common carriers grew from $508.9 million in 1974 to $1.7 billion in 1983, representing an annual compound growth rate of 14.6 percent. Total U.S. international telephone calls increased from 53.7 million to 369.5 million during the same period, representing an annual growth rate of 23.9 percent. Growth in service between the U.S. and Europe surpassed global growth with revenues retained by U.S. common carriers increasing from $187.9 million to $686.7 million, a 15.5 percent growth rate, and telephone calls increasing from 21.1 million to 147.7 million, a 24.2 percent growth rate. Other major international services did not grow as rapidly as IMTS. Telegraph service provided by U.S. common carriers, for example, declined on a global basis from $52.3 million in 1974 to $23.6 million in 1983, and revenues realized by U.S. common carriers for service between the U.S. and Europe fell from $14.2 million to $8.3 million. Telex service grew but more slowly than IMTS. Telex revenues earned by U.S. common carriers increasing from $142.7 million to $357.3 million, and the volume of telex messages rose from 37.6 million to 134.4 million during the period 1974-1983. Thus, telex revenues realized by U.S. common carriers grew at a compound annual rate of 10.7 percent while the message rate was 15.2 percent. Revenues from telex service between the U.S. and Europe

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[125] This estimate includes the international video or audio services PanAmSat proposed in its application. *See* PanAmSat Authorization Order, paras. 24 and 39, n. 22, File No. CSS-84-004-P(LA) (adopted July 25, 1985).

increased from $80.4 million to $156.4 million, a 7.6 percent annual growth rate, and messages grew from 21.9 million to 61.4 million, a growth rate of 12.1 percent. Revenues from the other major service category provided by U.S. Common carriers, private line service, increased from $77.0 million in 1974 to $154.0 million in 1983. This increase in the U.S. common carriers' total private line revenues represents a compound annual growth rate of 8.0 percent. Thus, as these data show, IMTS is the largest service category in international communications, and it has growth more rapidly than other services. These results are significant in view of the fact that the service restrictions prohibit separate satellite systems from providing this service.

179. Forecasts we have reviewed indicate that the demand for international telecommunications service is expected to continue to grow. In particular, the demand for international switched services is expected to grow at least as fast as overall demand. The INTELSAT traffic data base projects the global demand for satellite half circuits to grow from about 98,000 in 1985 to about 315,000 in 1998. Full-time half circuits, which are used predominantly to provide IMTS, comprise 95,070 half circuits in 1985 and 309,964 in 1998. For satellite service between the U.S. and European countries,[126] INTELSAT projects an increase in the demand for full-time units of utilization that will be used to provide voice service from 9,079 in 1985 to 31,283 in 1998.[127] Further, these forecasts show an increase in the proportion of full-time units of utilization that are expected to be used to provide voice service. Specifically, whereas 90.9 percent of the satellite half circuits between the U.S. and European countries in 1984 were used to provide voice services, the figure is expected to increase to 93.8 percent by the end of 1998.

180. We have examined another set of traffic forecasts that are available to us in an effort to determine the relative significance of switched services. These forecasts are not global traffic projections like the INTELSAT estimates but they are particularly important in this proceeding because they measure expected demand for service between the U.S. and CEPT countries for the period 1985-1995.[128] These forecasts

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[126] European countries included in these totals are: Austria, Belgium, Bulgaria, Cyprus, Czechoslovakia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Netherlands, Nordic countries, Poland, Portugal, Roumania, Switzerland, Spain, Turkey, U.K., U.S.S.R. and Yugoslavia.

[127] These figures include some satellite circuits that will be used to provide private line voice service, but the number is undoubtedly small. As an example, AT&T reports that in May 1985, 19 out of 7174 satellite circuits between the U.S. and Europe countries were used to provide private line voice service. The remaining 7155 circuits were used to provide IMTS.

[128] These forecasts were derived from forecasts by individual U.S. common carriers in Common Carrier Docket No. 79-184. They were used to develop the forecasts contained

show that the demand for IMTS between the U.S. and CEPT countries is expected to require 14,923 circuits by the end of 1985 and increase to 69,645 in 1995. When traffic forecasts for other services are added to the IMTS forecasts, the estimates increase to 17,649 circuits in 1985 and 81,743 in 1995.[129] Our analysis of these forecasts for service between the U.S. and CEPT countries shows that the results are consistent with the INTELSAT's traffic data base. The U.S.-CEPT forecasts indicate that IMTS is expected to represent about 85 percent of the total number of circuits and the remaining portion will be composed of record and other services. Hence, for cables, IMTS is the predominant service as it was in the case of the satellites. In addition, the number of IMTS circuits that are forecast, as a percentage of the total number of circuits that are forecast for all services, increases during the period after an initial decline. Specifically, IMTS circuits represent 84.6 percent of the total number of circuits that are forecast for 1985. This percentage declines to 84.1 percent in 1987, and, thereafter, it rises continuously to 85.2 percent in 1995. Thus, not only is the number of IMTS circuits that are forecast the largest portion of the total forecasts for service between the U.S. and CEPT countries for the period 1985-1995, but IMTS circuits represent an increasing portion of the total number of circuits that are forecast for all services.

181. INTELSAT, of course, provides global satellite service while the separate systems are proposing to provide service primarily between the U.S. and Europe. To gauge the relative size of the INTELSAT market which would be open to alternative systems if the President's determination is implemented, we have compared INTELSAT's projected non-switched service business between the U.S. and the European countries listed in footnote 126 with its global business. We first combined INTELSAT's projections of full-time units of utilization that are expected to be needed to satisfy demand for record services,[130] AVD service and data services between the U.S. and Europe as a measure of the projected satellite circuits that will not be included in the service restrictions that

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in the U.S. submission to the North Atlantic Consultative Meeting held January 8-11, 1985.

[129] The other services include record services, AVD, data services and other services. We were unable to tabulate these forecasts in a manner that is identical to our delineation of the services that are included in the restricted service categories. However, as was the case with satellite circuit forecasts, IMTS demand projections constitute most of the total estimates. To the extent other switched services have not been identified, the switched service market is understated.

[130] Some record services like telex and telegraph services are interconnected with the switched network but they involve a relatively small number of half circuits so including them in the estimate does not distort the results. Further, including them tends to increase the size of the market that is not restricted under the Executive branch restriction.

will be applicable to the separate systems.[131] Estimates of the demand for IBS in the Atlantic region were converted to units of utilization using the factors listed in footnote 106, and combined with the demand for record, data, and AVD services between the U.S. and Europe. The combined forecasts were compared to INTELSAT's global projections for all full-time units of utilization over the period 1985-1998. This period was divided into two segments, 1985-1990 and 1991-1998. The first segment includes INTELSAT's forecasts for IBS. The second segment does not include forecasts for IBS because the INTELSAT Traffic Data Base does not contain IBS forecasts for the latter period. This comparison shows that forecasts for transatlantic record service, AVD service and data services, plus Atlantic region IBS are less than seven percent of INTELSAT's global forecasts during the first segment of the period. The percentages range from 4.1 percent in 1985 to 6.7 percent in 1989. With the omission of IBS in the second segment, the percentages drop below two percent, ranging from 1.7 percent in 1991 to 1.2 percent in 1998. Since the forecasts for record, data, AVD, and IBS services do not account for the minimum time period requirement in our restrictions, these percentage figures overestimate the portion of INTELSAT's forecasts that could be provided by separate satellite systems.

182. To summarize the results of our analysis, the demand forecasts in INTELSAT's traffic data base and those for U.S.-CEPT traffic submitted in connection with our transatlantic facilities planning docket strongly suggest that the demand for international communications services interconnected with the public-switched network is expected to experience considerable growth. Indeed, INTELSAT has stated that it expects its conventional international traffic to grow at about 15 percent per year over the period 1988-2000.[132] INTELSAT's past forecasts have been optimistic to a certain degree but even a somewhat lower growth rate would still represent a substantial increase in the demand for INTELSAT satellite circuits. These services include IMTS, a switched service, which currently represents around 90 percent of INTELSAT's projected transatlantic units of utilization and is expected to represent even a higher percentage in the near future. Only a small percentage of INTELSAT's projected global full time circuit forecasts could be served by the separate systems under the service restrictions we impose with this order.

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[131] The method used to develop the estimate does not take into account the minimum time period requirement that is included in our restrictions imposed on separate satellite systems. From the information in INTELSAT's Traffic Data Base, we are unable to determine long-term leases. Some, perhaps many, of the full-time units of utilization for record, data, and AVD services do not satisfy the time requirement. Thus, our estimates are overstated.

[132] *See* INTELSAT Annual Report 1983 at 17.

183. *Impact of Entry on INTELSAT.* The demand projections that we have analyzed for international telecommunications service do not take into account the effects entry could have on the size and composition of the market or the benefits INTELSAT could realize if entry occurs and market size increases. Based on our experience with the domestic communications industry, we believe that entry will increase the economic welfare of communications users. We are well aware of the differences between the domestic and international markets but history has demonstrated that international communications consumers are very responsive to rate reductions and improvements in the quality of service. In addition, we believe that the market pressures created by entry will have a beneficial impact on INTELSAT, leaving it in a better position to meet its objectives and satisfy its obligations. We do not believe it is possible to quantify precisely the impact that entry by separate satellite systems will have on the international market or INTELSAT. However, by analyzing the market qualitatively, we can draw reasonable conclusions regarding both the probable effects and any foreseeable effects of such entry.

184. We have found that separate system operators intend to design their systems and tailor their services in such a way that the services meet customers' particular requirements. Their efforts may take the form of services that do not resemble any which are currently provided by INTELSAT or other suppliers. As we have found in reviewing the applications now on file, their efforts may take the form of services that are differentiated from available services, or are packaged differently from available services to meet a particular customer's specifications.

185. We expect rivalry among satellite service suppliers if entry takes place. This rivalry would put pressure on satellite suppliers to operate efficiently and to charge prices that reflect their costs of providing service. These pressures alone should stimulate the demand for satellite services. The pressures on demand will be reinforced by entry into the final service market by firms such as MCI International, GTE Sprint, Western Union and others. With entry by separate satellite systems, downward pressure would be exerted on the prices that are charged for satellite circuits leased to other service suppliers. As the number of service suppliers grows, they will be under increasing market pressure to reflect lower satellite circuit charges in the prices they set for consumer services. Together, service differentiation and lower prices brought about by separate satellite systems and final service providers would stimulate demand for service and enlarge the size of the international communications service market.

186. We believe that if entry takes place, INTELSAT would be a formidable rival and continue to be the preeminent satellite concern in a changing international communications market. There is no basis to

conclude that INTELSAT may encounter serious problems and lose substantial business to entrants in the markets where there are service restrictions in effect. Further, INTELSAT has the capability to respond and compete in those markets where there are no restrictions. INTELSAT is an established enterprise with a net investment in plant and equipment that exceeds $1.5 billion. Its total revenues amounted to $411 million in 1984. INTELSAT has more than twenty years of experience in operating a satellite system and providing satellite service. In recent years, INTELSAT has expanded the range of services it offers to the point where "Today INTELSAT provides hundreds of different services."[133] INTELSAT's financial condition is very sound. It has earned a cumulative rate of return on investment of 15.3 percent since 1973, $109.9 million over its target rate of 14 percent. In addition, INTELSAT will be the exclusive satellite supplier to a large, well-established and growing service market.

187. In anticipation of entry, it is reasonable to presume that INTELSAT will develop and offer additional services. Indeed, INTELSAT has moved in this direction already with several new service offerings. We expect this kind of business behavior by INTELSAT to continue and perhaps to intensify as the threat of entry becomes more real. Also, it seems reasonable to assume that INTELSAT will adopt new pricing strategies that are designed to retain its existing business and to expand into other markets. These steps will increase significantly the risks confronting separate satellite systems if they decide to enter the market. In contrast to INTELSAT, separate satellite systems operators have to arrange financial backing, to purchase and launch satellites, to develop markets for their services and to gain entry to foreign markets before they can begin to provide service. One commenter has argued, in fact, that entrants will face serious problems in gaining access to telecommunications users in foreign countries.[134] In light of these differences between INTELSAT and the potential entrants, we do not believe it is realistic to base an analysis of the impact that entry will have on INTELSAT on the assumption that services INTELSAT currently provides will be completely diverted to entrants. Analyses that use this assumption do not yield reasonable estimates of the impact entry may have on INTELSAT because the impact tends to be overstated. The studies completed by Hinchman rely on this assumption.[135] We believe that a more realistic assessment of the situation that is likely to evolve if separate systems enter the international market is that they may compete at the margin but

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[133] INTELSAT Annual Report 1984-1985 at 24.

[134] *See* Comments of Walter R. Hinchman at 9-13.

[135] *See* "Significant Economic Harm" and "International Satellite Competition Impact Analysis."

they will make no significant inroads into the major markets currently served by INTELSAT.

188. When we take all the relevant factors into consideration, we do not believe that entry by separate international satellite systems would inflict significant economic harm on INTELSAT. The service restrictions placed on the separate systems protect a major portion of INTELSAT's business from diversion. Since substantial growth is projected for the services that are subject to the restriction, the revenues that INTELSAT earns from providing these services will continue to increase. In the markets that are open to entry, rivalry among alternative suppliers is likely to expand service options available to users and exert downward pressure on the prices of these services. Together, these two forces can be expected to stimulate the demand for international telecommunications services, to increase the international telecommunications service market and to generate additional revenues.

189. We believe that INTELSAT will be able to compete effectively in those service markets that are open to entry and that it will earn its share of the additional revenues. With unused capacity available to meet customer demands, INTELSAT is in a strategic position to capture a substantial portion of the revenues in markets where entry is open. In the short run, INTELSAT has satellite capacity in operation, a major part of its costs have been incurred and the cost characteristics of satellite technology are such that average unit costs decline as service levels expand. This situation provides the basis for lower prices on all services offered by INTELSAT.

190. Further, with satellites already in operation, INTELSAT will be able to move into these markets before the separate systems begin operation and provide service. This time lag should benefit INTELSAT by enabling it to develop services to suit customer needs while potential satellite entrants are involved with obtaining the capital needed to finance their systems, with negotiating with satellite manufacturers to construct their systems, with making arrangements to launch their satellites, with purchasing their satellites and with launching the satellites successfully. While the potential satellite entrants are going through all these steps for the first time, INTELSAT will be able to concentrate its efforts on the markets it wants to serve and, perhaps, capture them before any separate system enters the market. We believe that entry would put added pressure on INTELSAT to plan, purchase and operate its satellite system in a fully cost efficient manner. We have noted the estimates of the amount of unused capacity reported in a recent study completed for INTELSAT.[136] This unused capacity existed in the past and, apparently, it will continue to exist, at least throughout the current decade. We realize

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[136] *See* The Economics of International Satellite Communications.

that some unused capacity must be maintained as spares for other satellites, to meet future growth in demand and to protect service against unexpected contingencies. Where market forces are allowed to operate, they provide incentives to insure that the amount of unused capacity is reasonable and excessive investment in capital equipment is penalized.

191. In conclusion, entry, by forcing INTELSAT to compete for some of its business, would put pressure on INTELSAT to operate its satellite system more efficiently, minimize its costs consistent with reasonable quality of service standards, and set prices to reflect its costs in those markets where entry occurs. As a result, INTELSAT's economic efficiency would improve, and the size of the entire market for non-switched services would increase as well, thereby strengthening INTELSAT's financial condition. Further, the restrictions to entry found by the President to be in the national interest will protect most of INTELSAT's business from diversion and ensure INTELSAT's continued financial success in a rapidly growing and lucrative market. Hence, based on all the information and data that we have examined in this proceeding, we conclude that authorizing separate international satellite systems to enter the international telecommunications market and to offer those services that are not prohibited by the service restrictions proposed as part of the Presidential determination would not subject INTELSAT to significant economic harm. INTELSAT may lose a small part of its business to entrants but we foresee an increase in the size of the market beyond that contemplated by INTELSAT prior to the possibility of entry. We believe that demand will be stimulated to more than compensate for a smaller market share.

192. *Prejudice to Direct Links.* In addition to the consideration of significant economic harm, Article XIV(d) of the INTELSAT Agreement states that the Assembly of Parties, taking into account the advice of the Board of Governors, shall make recommendations regarding the assurance that the provision or utilization of separate satellite facilities shall not prejudice the establishment of direct communications links among all the participants. This test was enunciated by the framers of the INTELSAT Agreement to further their goal of establishing a global system that would allow members to access other members through the INTELSAT space segment. Therefore, we believe that this requirement might reasonably be interpreted to protect against systems that would directly prevent (*e.g.* through legal prohibitions) direct links among those countries using a separate system, or might divert enough traffic among those countries using a separate system to pose a serious threat to their ability to maintain direct links to other members (*e.g.* through the inability to afford dual systems).

193. In light of the economic analysis above and the following additional considerations, we believe that authorization of any of the applications should not prejudice the ability of those countries participating in the separate system to access INTELSAT directly. First, there would certainly be no legal impediment created by the U.S. and other participating countries which would prohibit continuation of communications links through INTELSAT. Second, since participation in separate satellite systems is voluntary, there would also be no financial impediment to continuation of links through INTELSAT since no country would join in the consultation for the separate system if it had any doubt in its ability to participate simultaneously in multiple satellite systems. Therefore, there is no reason to conclude that these systems would "prejudice the establishment of direct communications links among all the participants."

194. As a final point, we note that an argument has been made that the term "participants" in the language Article XIV(d) refers to all members of INTELSAT and not solely to those members participating in the separate system. While we believe that this interpretation stretches the meaning of the word "participants," we would note that the authorizations would even satisfy this alternative test. As we indicated earlier, authorization of these systems should not cause any adverse financial impact on the organization as a whole. We also believe that it will not cause any adverse financial impact on any of the members of INTELSAT and, therefore, will not affect their ability to maintain their INTELSAT connections.

C. Other Considerations

1. Pricing Flexibility

195. In our Notice we solicited comments on the extent of INTELSAT's ability to alter its rate structure in response to competition. We requested commenters to identify any existing constraints on INTELSAT's pricing flexibility and to discuss any modifications of INTELSAT's pricing structure necessary to ensure that INTELSAT remains a viable competitive entity.

196. In the White Paper, the Executive branch states that INTELSAT possesses sufficient pricing flexibility in setting its rates for services and utilizes an established policy that prices should reflect costs. The White Paper also points out, though, that INTELSAT is somewhat limited in its flexibility because the rate that will actually compete with the separate system rates is the rate signatories charge end-users for the entire service and not the circuit utilization charge INTELSAT charges the signatories. The White Paper, however, concludes that INTELSAT has sufficient flexibility to structure its rates and, with its other competitive advantages, will be a strong competitor in the marketplace. In addition, the

Department of State recently issued a paper which supports the findings set out in the White Paper and states that INTELSAT has the flexibility to price according to the operational parameters, type of service offered, bandwidth, type of transponder used, degree of protection and satellite to be used. The former paper also notes that INTELSAT can decide which services to provide to which markets under which conditions. Thus, it concludes that INTELSAT has sufficient flexibility in pricing to meet competition and that no change in the INTELSAT Agreement is required.[136A]

197. A recent document issued by the Director General of INTELSAT criticizes the State Department's position and argues that INTELSAT cannot price competitively to meet the rates that will be set by the separate satellite system.[137] The document states that legal restraints exist which preclude INTELSAT from defining services and setting rates that discriminate directly or indirectly against a particular user or group of users. The paper notes that Article V(d) of the INTELSAT Agreement states:

> All users of the INTELSAT space segment shall pay utilization charges determined in accordance with the provisions of this Agreement and the Operating Agreement. The rates of space segment utilization charge for each type of utilization shall be the same for all applicants for space segment capacity for that type of utilization.

According to the document, establishing services and charges on an individual route or geographic basis is necessary to compete with the separate systems, and Article V(d) prevents INTELSAT from doing so. The paper then concludes that the State Department's position improperly suggests that INTELSAT introduce pricing flexibility "though the back door" and that an amendment to the INTELSAT Agreement is required before INTELSAT could price on a route-by-route and region-by-region basis.

198. In their comments, FTC, ABC, NBC, CBS, AT&T and Amb. Abbott Washburn support INTELSAT moving toward cost-based pricing and de-averaging its rates. They state that the United States, along with the other members of INTELSAT, must consider amending Article V(d) in order to give INTELSAT complete pricing flexibility to compete with the rates of separate systems. In fact, Mr. Washburn argues that the separate systems should not be authorized until the necessary changes in INTELSAT's pricing structure are made. RCA, PanAmSat, Orion and ISI, on the other hand, support the Executive branch position and argue that

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[136A] Memorandum of Department of State, "Flexibility to Compete, INTELSAT in an Era of Separate Systems," (May 1985) *reprinted in* INTELSAT Document, BG-63-93E, Addendum No. 1 (June 14, 1985).

[137] INTELSAT Document, "INTELSAT's Legal Flexibility to Compete," BG-63-93E (June 5, 1985).

INTELSAT has sufficient pricing flexibility to compete effectively with the separate satellite systems. In its comments, Comsat does not take a position on whether INTELSAT has sufficient pricing flexibility to meet competition from the separate systems, but emphasizes that it is Comsat's prices, rather than INTELSAT's prices, which will actually compete with the separate systems' rates. In this regard, Comsat states that it possesses substantial latitude to respond to competitive challenges and intends to compete vigorously with the separate systems. Finally, the Department of Justice concludes that INTELSAT's pricing flexibility is not directly relevant to this proceeding because INTELSAT is assured of remaining a viable entity due to the restrictions placed on the separate systems.

199. A number of parties believe that the pricing flexibility issue is an important factor that must be taken into consideration by the Commission to determine whether INTELSAT will be able to compete with new suppliers. We have already found that INTELSAT will not be harmed by separate systems. In view of this finding, and the fact that both INTELSAT and Comsat are free to establish rates closer to costs in response to competition, we see no reason why a determination of the adequacy of INTELSAT's pricing flexibility is a prerequisite to the authorization of separate systems. We note, also, that only INTELSAT has authority to change its pricing policy through an amendment to its charter.[138] As a member of INTELSAT, the United States will have one vote in the Assembly of Parties on such a question. Moreover, the U.S. position on this matter is not determined by the Commission alone, but by the Executive branch in consultation with the Commission. Thus, in light of these considerations, we will not reach any conclusions in this proceeding as to the pricing flexibility issue. We will, however, consider the record in this proceeding in our consultations with the Executive branch on this matter.

2. Effect on Developing Countries

200. The National Black Media Coalition, TransAfrica and the American Committee on Africa argue that the separate satellite systems will cause INTELSAT's costs to increase by diverting traffic from the INTELSAT system and that these increased costs will fall disproportion-

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[138] Pursuant to Article XVII of the INTELSAT Agreement, Tanzania and Cameroon have proposed an Amendment to Article V(d) to give INTELSAT additional pricing flexibility "to meet competition in various ocean regions or traffic routes." This proposal will be considered by the INTELSAT Assembly of Parties at its ordinary meeting in October 1985.

ately on the developing nations which are least able to afford them.[139] They argue that the developed nations with access to the separate systems will decrease their investment share in the INTELSAT system by using the separate systems and, as a result, the increased costs will fall on the developing countries which have no access to the separate systems. They further note that the Hinchman report estimates that INTELSAT's costs could increase by approximately 30 percent.[140]

201. We do not find that the authorization and entry of separate satellite systems will result in increased costs to the developing countries. In this decision, we have gone through an extensive analysis of the potential effects entry of these systems will have on INTELSAT and find that INTELSAT stands to realize substantial long term benefits from their entry. We find that the restrictions imposed on these systems will protect much of INTELSAT's business from diversion and will ensure INTELSAT's continued financial success in a rapidly growing and lucrative market. Since substantial growth is projected for the services that the separate systems will not be able to provide, usage of the INTELSAT system and the revenues INTELSAT earns from providing those services will continue to increase. Moreover, INTELSAT should be able to earn its share of revenues in the market open to the separate systems. Consequently, we conclude that INTELSAT will continue its

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[139] A related issue is the assertion that entry by separate systems will cause prices of service to developing nations to rise because INTELSAT's uniform rate structure results in high volume routes subsidizing low volume routes and high density regions, like the Atlantic region, subsidizing low density regions, like the Pacific region. This argument goes on to say that entry by separate satellite systems will force INTELSAT to deaverage its rates which will result in higher costs for developing nations. In its comments, Orion included two reports prepared by Dale N. Hatfield Associates on the issue of cross-subsidy. In one report, "An Analysis of INTELSAT Subsidy Issue," Hatfield attempts to quantify the cross-subsidy issue by estimating INTELSAT's rate of return on investment for each ocean region. Although handicapped by data limitations on INTELSAT's revenues, expenses, and investment, Hatfield finds that the rates of return on net investment differ among the Atlantic, Pacific, and Indian regions and that the estimated rates of return depend crucially on the mechanism that is used to allocate investment among the regions. This mechanism is arbitrary according to Hatfield who finds that the direction of the subsidy changes if different allocation mechanisms are used. The other report completed by Hatfield, "Issues in International Telecommunications Pricing and Demand," concludes that, if a subsidy exists, it would flow from heavy traffic routes to thin routes with Standard A earth stations. But, Hatfield concludes that the impact on developing countries is negligible since INTELSAT charges make up less than 10 percent of end-to-end satellite costs. Finally, the study finds that "it appears safe to conclude from the evidence in the two reports that if a subsidy exists it is difficult to quantify." ("Issues in International Telecommunications Pricing and Demand" at 11).

[140] As we have stated in para. 157, *supra,* we do not believe the cost increases in the Hinchman report are reasonable estimates because they are based on unrealistic assumptions.

financial success, its costs will not increase and it will not have to increase its rates.

202. In addition, our conclusions are supported by a recently issued NTIA Summary Analysis of INTELSAT Economics.[141] In this document, NTIA concludes that INTELSAT will not lose any revenues as a result of competition and that INTELSAT revenues should actually increase as a result of competition. NTIA, though, finds that under the bleakest assumptions, INTELSAT would have to increase revenues from the non-competitive market, *i.e.*, public-switched market, by slightly over 5 percent by 1987. However, NTIA explains that a 5 percent increase in revenues would only require an increase of $1.34 per day per circuit. Moreover, NTIA argues that INTELSAT's circuit charges account for only a fraction of the total end-user price[142] and a minor increase need not be passed on to the end-user. It contends that the increase in cost could be absorbed by either the signatories, which traditionally have high mark-ups on INTELSAT's circuit charges, or by INTELSAT, which has been earning and paying a return on the signatories' capital investment over the 14 percent targeted rate of return.

3. Effect on U.S. Satellite Equipment Manufacturers

203. In our Notice, we requested comments on the effects of authorizing international separate satellite systems on the U.S. manufacturers of satellite equipment. Specifically, we requested data and analyses on any changes in the amount of revenues earned by U.S. satellite equipment manufacturers or in the development of satellite equipment technology which would stem from the introduction of competition in the international satellite industry. We also ask for comments on what steps the Commission could take to protect U.S. manufacturers of satellite equipment should foreign governments adopt anti-competitive practices in satellite procurement procedures in reaction to the entry of separate systems.

204. RCA, ISI, Orion and United Satellite Action state that the authorization of separate systems will benefit the U.S. satellite equipment manufacturers because separate systems will increase the demand for satellite transmission services and thus will create an increase in demand for satellite equipment. In addition, these parties argue that, if INTEL-

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[141] INTELSAT Economics, Summary Analysis, reprinted in INTELSAT Document, "Economic Studies Relating to International Satellite Communications," MS-15-19E Attachment No. 2 (April 11, 1985).

[142] It has been estimated that INTELSAT's charges for satellite capacity generally represent less than 10 percent of the total cost to the end-user of the international satellite system. *See* Statement of Richard R. Colino before the Subcommittee on Arms Control, Oceans, International Operations and Environment, Senate Foreign Relations Committee, October 19, 1983.

SAT must decrease its purchases of satellites with the advent of these systems, the increase in purchases of satellite equipment by the separate satellite system operators will compensate U.S. equipment manufacturers for any lost revenues. They also contend that the U.S. manufacturers will not lose any revenues from INTELSAT in the short run because INTELSAT has already contracted with U.S. companies for its INTELSAT V and INTELSAT VI programs which will continue to provide services into the 1990's. They further suggest that U.S. firms will incur no long run revenue loss from the INTELSAT market, since the INTELSAT Agreements require open bidding procedures which award contracts on the basis of price, quality and delivery time.

205. In the White Paper, the Executive branch finds that the U.S. satellite equipment manufacturers have obtained a substantial share of INTELSAT's procurement expenditures because they offer the best in satellite technology, quality and price. Therefore, the Executive branch concludes, the U.S. satellite equipment manufacturers will continue to be successful and competitive in the marketplace. In addition, the Executive branch notes that, since INTELSAT will be subject to limited competition, it will have every incentive to purchase the most economical and highest quality equipment in the future. The Executive branch also states that if a separate system complies with any requirement imposed by a foreign government mandating that the system purchase equipment manufactured by its nation's firms or government as a condition to obtain an operating agreement, the United States would consider declining to coordinate the system under Article XIV(d).

206. Other parties, however, contend that the U.S. satellite equipment manufacturers will be adversely affected by the entry of separate satellite systems in the international communications market. Hughes argues that, with the advent of these systems, INTELSAT would experience a decrease in demand for its services and, as a result, would require less satellite equipment. Thus, notes Hughes, entry of separate systems would lead INTELSAT to decrease its purchases of equipment manufactured by U.S. firms, which supply a substantial amount of INTELSAT's equipment. Hughes includes the cumulative contract values of commercial satellites through the end of 1984 which show that U.S. manufacturers have obtained about 71 percent of the total contract values for the commercial satellite market. The figures also show that INTELSAT's purchases were 26 percent of the total contract values, and U.S. domestic satellite purchases were 34 percent of the total contract values. Hughes further states that the prime contracts for all INTELSAT and U.S. domestic satellite spacecraft have been obtained by U.S. firms. In addition, Hughes contends that since INTELSAT will be unable to contract for the number of satellites over a given period of time that it has

in the past, and since separate system operators would purchase only one or two satellites and be constrained to off-the-shelf technology, there will be a substantial decrease in technological stimulation and, thus, development. Also, both Hughes and Amb. Washburn argue that the foreign governments will require the separate system operators to purchase a substantial amount of their equipment from foreign companies before the foreign government will sign an operating agreement. Thus, they contend that the U.S. manufacturers will lose both INTELSAT's business and the business of separate systems. Amb. Washburn states that INTELSAT may abandon its open bidding policy in retaliation for the authorization of separate systems and purchase all of its satellites from foreign companies.

207. In its reply comments, ISI states that the data supplied by Hughes are misleading since they fail to include satellite equipment used by the Soviet and Intersputnik systems. In addition, ISI contends that there are a number of technological advances which are not the result of INTELSAT's procurement of satellites and, therefore, the entry of separate systems will not hinder technological development. Finally, ISI states that it intends to procure spacecraft under competitive practices similar to INTELSAT's and would not agree to purchase satellite equipment from a foreign company in order to obtain an operating agreement.

208. Any foreseeable harm which could affect the U.S. manufacturers of satellite equipment could only result from a loss in revenues incurred in providing equipment to INTELSAT. In order to determine the effect that separate systems may have on these manufacturers, we have evaluated the size of the INTELSAT market in relation to the total size of the industry in which INTELSAT's actual and potential manufacturers compete. Specifically, in our evaluation, we have compared the INTELSAT equipment manufacturing market with the combined equipment manufacturing market for all types of satellites, *e.g.*, those satellites used for navigation, science, weather and military purposes as well as commercial communications satellites. Despite various differences in the function of these satellites, they all share common technology, such as propulsion systems (for orbital insertion and station-keeping), power systems (including solar panels and batteries), stabilization systems and telemetry and telecommand equipment. As further evidence of the substitutability of different types of satellite equipment, we note that firms engaged in satellite manufacturing tend to build various types of satellites.

209. We separated the U.S. satellite equipment industry into three separate markets: (1) spacecraft equipment; (2) launching vehicle equipment; and (3) ground equipment. We found that each of these markets

involves different technologies and that different U.S. firms dominate each market. We then compiled the approximate amount of revenues obtained by U.S. satellite equipment manufacturers from the spacecraft and launching vehicle markets, respectively, separating out the revenues derived from INTELSAT procurement. In the ground segment market, since we were unable to obtain estimates of the proportion of U.S. manufacturing content, we compiled information on the approximate amount of revenues spent by the Department of Defense (DoD) which we attributed to U.S. firms, and on the approximate dollar value obtained from manufacturing U.S. home satellite dishes, U.S. domestic earth stations and INTELSAT earth stations, respectively.

210. U.S. companies have supplied a substantial amount of INTELSAT equipment. In our evaluation of the size of the INTELSAT market for U.S. equipment in relation to the total market for U.S. spacecraft, launching vehicles, and ground equipment, we found that in each of the three segments of the satellite equipment industry the INTELSAT market is sufficiently small that even a complete loss of revenues derived from the INTELSAT market would not appreciably affect the U.S. satellite equipment industry as a whole. Figures 1 and 2, and Table 1 summarize the information we compiled on each segment of this industry.

211. In our analysis of the satellite spacecraft market, we accumulated data on the U.S. share of INTELSAT spacecraft and all other commercial satellite systems as well as spacecraft built for the National Oceanic and Atmospheric Administration (NOAA), the National Air and Space Administration (NASA), and the Department of Defense (DoD). Tables 3, 6, 7, 8, 9 and 10 summarize these data. We find that between 1980 and 1990 an average of $5.4 billion annually will accrue to U.S. firms from manufacturing non-INTELSAT satellite spacecraft, as compared with an average of $112 million annually which will accrue to U.S. firms from the manufacture of INTELSAT spacecraft. Thus, from 1980 to 1990, we expect the manufacture of INTELSAT spacecraft to account for at most two percent of the U.S. spacecraft equipment market.

212. In our analysis of the launch vehicle market, we accumulated data on the U.S. share of the launching revenues obtained from INTELSAT and the total revenues obtained by NASA and DoD.[143] Tables 4, 8, 9 and 11 summarize these data. We find that INTELSAT procurement for launching services will average $73 million annually for the years 1980-1990, as compared with the amount of revenues accruing to NASA and DoD, which will average $3.7 billion annually for the same time period. As in the spacecraft equipment market, the revenues obtained by U.S. manufacturers from the launch of INTELSAT satellites

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[143] NASA and DoD are the only U.S. entities which launch satellites.

are expected to account for approximately two percent of the revenues to U.S. manufacturers for the launch of all satellites during 1980-1990.

213. In our analysis of satellite ground equipment, we accumulated data on DoD's procurement of ground equipment, which we attribute to U.S. manufacturing firms. Otherwise, we were only able to obtain reliable data on revenues to world industry in general, not the U.S. industry in particular, from the manufacture of ground equipment. In addition to estimating the size of the total INTELSAT earth station market, we also estimated the size of the U.S. home satellite antenna market and the U.S. domestically licensed earth station market, both of which we assume to contain a substantial proportion of U.S. manufacturing content. We find that the amount of revenues obtained by world industry from manufacturing INTELSAT ground satellite equipment from 1980 to 1984 was an average of $181 million annually, while the amount of revenues obtained by U.S. manufacturers from manufacturing DoD satellite ground equipment was an average of $2 billion annually for the same time period. See Tables 5, 9, 12 and 13 summarize these data. We also find that from 1980 to 1984 the average revenues obtained annually from the manufacture of U.S. home satellite dishes and U.S. domestic earth station equipment were $1 billion and $220 million, respectively. In comparing the available data, we find that the amount of revenues obtained by world industry from manufacturing INTELSAT earth stations during the period from 1980 to 1984 was less than 1/10 of the amount obtained by U.S. firms from building DoD ground equipment and less than 1/6 of the amount obtained by world industry from building civilian earth stations located in the United States. (*i.e.*, earth stations licensed with the Commission and home satellite dishes). Table 1 summarizes these data. It is important to note that the INTELSAT figure includes revenues from all INTELSAT earth stations and not merely the INTELSAT earth stations located in the United States, and, therefore, the figure overstates the impact on U.S. manufacturers if the INTELSAT revenues were to be lost to other competitors.

214. In addition to our finding that the total loss of revenues from supplying INTELSAT satellite equipment would not substantially affect the total U.S. manufacturing market for satellite equipment, we also conclude that U.S. firms will not lose an appreciable amount of their revenues obtained from manufacturing INTELSAT equipment. Since the separate systems are limited in the provision of services, INTELSAT will retain its share of the international public-switched service market and will also be competing with the separate systems in the customized services market. INTELSAT, therefore, will continue to need a substantial amount of satellite equipment to provide its services and, with the introduction of increased competition, INTELSAT has every incentive to

purchase the most economical and best quality equipment available. We find that the success enjoyed by the U.S. manufacturers of satellite equipment is a clear indication of the ability of these manufacturers to offer high quality equipment at relatively low prices, and we conclude that U.S. firms will continue to be strong competitors in the satellite equipment industry and the INTELSAT market in particular. Moreover, it is unlikely that INTELSAT will change its procurement practices in retaliation for the authorization of separate satellite systems since there will be minimal impact on the INTELSAT system from the entry of these systems in the international communications services market.

215. We also find that the satellite system owners would have every incentive to purchase the most economical and best quality satellite equipment in order to effectively compete in the marketplace. Therefore, we find that these system operators would be unlikely to enter operating agreements which would require them to purchase satellite equipment from foreign companies that, absent procurement restrictions, they would not find in their business interests to purchase. We will, however, require, as a condition in the authorization orders, separate satellite system operators to file any operating agreements they enter into with foreign entities with the Commission and will reconsider the authorizations of satellite system operators who enter an operating agreement with satellite procurement restrictions. We further find no support for Hughes' claim that the entry of separate satellite systems would hinder technological development because of a decrease in INTELSAT purchases. Since we have already determined that the portion of the U.S. satellite equipment market attributable to INTELSAT is small in relation to the total U.S. market, we find that the development of satellite technology is not primarily a product of INTELSAT procurement. In fact, as ISI notes, many of the important advances in satellite equipment technology have been introduced in satellites not procured by INTELSAT. Moreover, we have already determined that INTELSAT will not be significantly affected by the introduction of separate systems.

216. Finally, we conclude that there is a solid basis on which to determine that the entry of separate satellite systems could have a beneficial effect on the U.S. satellite equipment industry. As we have already stated, we find that the entry of these systems would introduce competitive benefits to the international communications marketplace and could lead to an increase in demand for satellite services. If there is a corresponding increase in demand for satellite services, there would necessarily also be an increase in demand for communications equipment from which U.S. manufacturers would benefit. In fact, as competition advances in the international satellite arena, thereby increasing the incentives for satellite owners to be as efficient as possible, we would

expect U.S. firms to obtain a disproportionate share of added manufacturing revenues. Though we are unable to approximate the amount of additional revenues which we expect to accrue to U.S. satellite manufacturers as a result of the entry of separate systems, we note that the applications already on file with the Commission propose to generate over $1 billion dollars in equipment manufacturing revenues.

4. Excessive Capacity

217. Amb. Washburn in his reply comments states that the authorization of separate international satellite systems will lead to substantial increases in communications capacity in the North Atlantic. He contends that the entry of the separate systems along with the newly authorized cable facilities will encourage foreign governments to build competing systems resulting in gross overcapacity in the North Atlantic Ocean region. Amb. Washburn estimates that a demand-supply imbalance approaching a ratio of 11 to 1 would be reached by 1995 causing substantially increased rates for public-switched services and decreased rates for customized services. In addition, Comsat includes a report in its Comments, entitled "Alternative Satellite Systems: Economic and Technical Considerations" by Mar Tech Strategies, Inc., which also evaluates the potential for excess capacity that could result from the entry of separate satellite systems into the international telecommunications market. This report estimates that the "customized service" demand will require 36 transponders in 1990 while the entry of alternative satellite systems will result in a supply of 202 active transponders to meet that demand.

218. We do not subscribe to the theory that separate systems should not be permitted because their entry will result in a gross imbalance between supply and demand. First, as we have found, separate systems will stimulate demand for communications services and increase the overall size of the international communications market. In addition, the financial markets and the potential systems owners will serve as an effective check on the amount of capacity built in the North Atlantic region. Potential entrants must secure financial backing from the financial institutions before they can contract with manufacturers for the systems to be built. Financial institutions will not commit funds without closely scrutinizing the risks involved in any venture. Thus, if there is a substantial risk of overcapacity and insufficient demand, the financial institutions will not commit their funds to build these systems. Likewise, since these systems involve private investment with the risk of failure falling on the investors and not directly on any common carrier ratepayer, potential system owners will carefully consider the risks of failure. Finally, the authorization of separate systems may serve as a competitive check on the amount of INTELSAT's capacity in the North Atlantic.

Through Comsat, whose ownership share of INTELSAT is presently 23 percent, we may exert some influence over INTELSAT on the proper amount of INTELSAT capacity in the North Atlantic in light of the capacity of separate systems and other facilities authorized in the region. As we have previously stated, however, if INTELSAT commits to a program, whether or not Comsat supports the program, Comsat is also committed to that program.[144] Thus, authorization of these systems may serve as a competitive check on the amount of INTELSAT's capacity in the North Atlantic.

5. *Foreign Policy Considerations*

219. Several parties, including some members of Congress, request that the Commission carefully consider the foreign policy implications of authorizing international separate satellite systems. We recognize that these applications raise significant foreign policy and national security issues. However, we must look to the Executive branch for direction in the determination and execution of foreign policy.[145] Therefore, we view as conclusive the findings set forth in the Presidential determination and the joint letter from the Departments of State and Commerce, which set out the criteria necessary to assure that the United States meets its international obligations and furthers its foreign policy interests.

220. Of related interest is a brief paper, accompanied by a more detailed study, filed as a public comment in this proceeding by Philip H. Trezise, a researcher, writer and consultant in the field of foreign economic policy.[146] These documents, taken together, suggest that if the United States chooses to license separate satellite systems, it would still be faced with the critical choice of whether to license separate systems first and negotiate with other governments later or to negotiate with other sovereigns first and then to license separate systems in accordance with the outcome of the negotiations. The authors conclude that the second alternative is preferable, both from a foreign relations standpoint and from the perspective of obtaining increased competition in international communications. The first alternative is criticized in these filings as leading to intergovernmental confrontation, and examples are provided to

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[144] *See* Communications Satellite Corporation, 84 FCC 2d 377, 380 (1980).

[145] The President's authority over the foreign policy and national security interests of the United States are recognized as part of his implied powers under Article II of the Constitution. *See* United States v. Curtiss-Wright Export Corporation, 299 U.S. 304, 319 (1936).

[146] Philip H. Trezise, "Unilateralism in International Trade: Will We Ever Learn?" (received July 12, 1984); accompanied by Bert W. Rein, Bruce L. McDonald, Danny E. Adams, Robert E. Nielson and Carl R. Frank, "Implementation of a U.S. 'Free Entry' Initiative for Transatlantic Satellite Facilities: Problems, Pitfalls and Possibilities," a study by the law firm of Wiley and Rein, counsel for Comsat in this proceeding.

support the notion that past attempts to implement U.S. policy unilaterally on sovereign nations have proved counter-productive. After analyzing the Trezise filings, we remain unconvinced of any dangers inherent in licensing international communications facilities prior to obtaining negotiating agreements overseas. For the United States to license international facilities does not in any way challenge the sovereignty of other nations to adopt whatever policy they see fit but merely suggests to these nations certain policies currently advocated by the United States. The discussion provided in the Trezise filings points out quite correctly, however, the importance of affording proper respect to international comity and of noting the past disagreements among various sovereigns over matters of international communications policy. These points had without a doubt been considered extensively by the Executive branch in reaching their "national interest" determination as we have considered them in analyzing whether the licensing of separate systems at this time is in the public interest.

6. Direct Access

221. Since the potential for introducing alternative international systems brings into consideration additional factors which may increase the desirability of direct access to INTELSAT by U.S. carriers, the Commission invited comment on the possibility of allowing direct access as a means of promoting efficiency in the provision of international satellite services.[147] Several parties argue in favor of direct access, contending that it would lower prices and increase service flexibility for end users of international telecommunications services as well as improve the ability of INTELSAT to compete against alternative systems. They also affirm the authority of the Commission to implement direct access. Comsat, on the other hand, states that the Commission should not institute direct access in any form because direct access would not result in economic savings to carriers or end users, but would add an unnecessary layer of regulation and have the paradoxical affect of bypassing Comsat, an owner of INTELSAT, in order to improve INTELSAT's competitive position. Other parties argue that under no circumstances should resolution of this issue delay the separate satellite proceeding. These commenters state that the issue of direct access would be appropriately addressed in a discrete proceeding. NTIA petitioned the Commission, on February 21, 1985, to reopen the issue in a separate

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[147] The issue of whether to allow direct access to the INTELSAT space segment by U.S. carriers other than Comsat or, additionally, by end users of satellite services has been considered by the Commission in a previous rulemaking. *See* Regulatory Policies Concerning Direct Access to INTELSAT Space Segment for the U.S. International Service Carriers, 90 FCC 2d 1446 (1982) (Notice of Inquiry); FCC No. 84-129, 49 Fed. Reg. 19132 (1984) (Report and Order terminating the proceeding).

rulemaking proceeding.[148] In light of the existence of NTIA's petition, we find that it would be premature to consider the direct access issue in the context of the separate satellite proceeding. We conclude that the two issues involve sufficiently different facts as to merit discrete treatment by the Commission. The White Paper appears to support this conclusion, stating that direct access is not a prerequisite for and should not be a basis for delay in action on the separate systems applications.[149]

7. Orbit/Spectrum Efficiency

222. In our Notice, we observed that demand for orbital positions in certain portions of the geostationary-satellite orbit, particularly that portion over the Atlantic Ocean, has increased markedly in recent years. We also noted that arguments had been advanced suggesting that a common-user system such as INTELSAT is more orbit/spectrum efficient than the separate international systems would be. Conversely, arguments had been advanced that systems proposed by the separate satellite applicants would not necessarily be less efficient and that for any system (common-user or otherwise) to provide certain types of services would require operational trade-offs which might lead to less efficient configurations. We specifically sought comments on this issue and, in particular, on the degree to which we could rely on economic incentives to achieve greater efficiency. In this context, most of the applicants explicitly claim that the systems they have proposed in their applications have been designed to maximize spectrum/orbit efficiency.

223. RCA states that its SATCOM VI satellite, like the other applicants' satellites, would be a "common-user" system since it would be meeting the satellite communications needs of more than one administration, and that there should be no different treatment for itself and INTELSAT. RCA contends that INTELSAT does not necessarily provide a more efficient use of the geostationary orbit than some other common user systems. It adds that because of other current and proposed satellites near SATCOM VI, RCA has an incentive to use the geostationary orbit efficiently, and will take all steps to minimize interference with other domestic and international systems.

224. Orion states that the spectrum/orbit efficiency issues must be addressed in economic terms with regard to the trade-offs that are inherently involved in different types of systems. It argues that while INTELSAT might be deemed more efficient because of its ability to cover

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[148] Petition for Rulemaking to Consider Authorizing Competitive Access by Carriers and Users to the INTELSAT Space Segment for the Provision of Customized International Communications Services, RM-4904 (filed February 21, 1985). In this petition, NTIA advocated allowing "competitive" access by carriers and users to the INTELSAT space segment for the provision of customized services.

[149] White Paper at 33.

large areas of the globe with relatively few satellites, such a system rules out the possibility of economies of specialization because it is unable to effectively serve the needs of highly specialized user markets or of specific geographic areas. Orion believes that the Commission is correct that the extent to which a particular satellite network may be deemed more or less efficient in its utilization of the spectrum/orbit resource is determined largely by the economic incentives and the primary mission or objectives of the network operator.

225. PanAmSat limits its comparison of the efficiencies of its proposed satellite facilities with those of INTELSAT's satellites, to 4/6 GHz service since INTELSAT does not offer 11-12/14 GHz service to South America. Assuming the use of 72 MHz of bandwidth and the use of a thirty-foot antenna, PanAmSat concludes that, when using a full-transponder telephony carrier, INTELSAT would be able to accommodate 360 telephone channels while PanAmSat's own system could accommodate 864 channels. In an FDM/FM companded mode, the number of channels for INTELSAT and PanAmSat satellites were calculated to increase to 792 and 5784, respectively. For operation with 64-kbps digitally-encoded SCPC telephone carriers using six-meter antennas (and still comparing a 72 MHz bandwidth), PanAmSat calculates that an INTELSAT satellite could handle 318 carriers and a PanAmSat satellite 1094 carriers. For 1.544-Mbps (T1) carriers, INTELSAT satellites could accommodate 14 carriers while PanAmSat satellites could accommodate 44 carriers. PanAmSat states that the advantage of its system stems largely from the high EIRP of its satellites.

226. ISI states that INTELSAT's latest series of satellites, the INTELSAT V and INTELSAT VI series, are hybrid satellites that employ both the 4/6 and 11-12/14 GHz bands and, therefore, can be inherently inefficient if the orbital spacing criteria for the two bands are different, or if one band is used efficiently, but the other is not used efficiently. ISI also states that INTELSAT's use of movable beams may prevent the use of an orbital position by another satellite to illuminate any portion of the earth if the movable beam is not restricted to serving a particular area.[150] In comparing the 11-12/14 GHz facilities to be used by itself and INTELSAT, ISI states that the INTELSAT V and VA satellites have a single use by three transponders of about 400 MHz in each of the two uplink and downlink beams in that band. ISI notes that for the INTELSAT

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[150] As these two spectrum/orbit efficiency issues relate to satellites licensed by this Commission, the issue of hybrid satellites has been addressed in Orbit Deployment Plan — Domestic Satellite, 84 FCC 2d 584, (1981) (hereinafter referred to as "1980 Assignment Order"), and Licensing of Space Stations in the Domestic Fixed-Satellite Service, 48 Fed. Reg. 40233 (1983), *recon. in part*, (hereinafter referred to as "Reduced Orbital Spacing") at para. 77 - 79; and the issue of movable beams is addressed in paragraphs 249-250, below.

VB satellites, the configuration is the same except that only about 220 MHz are available in each beam. Since those beams on the INTELSAT V series satellites use 10-watt transponders, the total power available on each satellite in the 11-12/14 GHz band is 60 watts. For INTELSAT VI satellites, ISI states that the spectrum availability is increased to a single use of 500 MHz by five 10-watt transponders, giving those satellites a total power in the band of 100 watts. In contrast, ISI notes that its proposed satellites would employ two full uses of 500 MHz in each of two beams using sixteen 10-watt transponders and sixteen 20-watt transponders, thus giving its satellites 1000 MHz of available spectrum in each direction and a total space station power of 480 watts.

227. Comsat simply states that if conflicts in orbital positions arise between INTELSAT and the separate satellite applicants, they should generally be resolved in favor of INTELSAT, "... which, as a common user system, provides more efficient use of spectrum/orbit resources than can be realized by separate U.S. and foreign-based satellite systems."

228. While we will not debate the meaning of the term "common-user system" here. As discussed above, we recognized that INTELSAT has designed its space station facilities in a fashion that is suitable for the provision of its primary services. However, it is also clear that the separate satellite applicants can provide specialized services with facilities configured in a very efficient manner that can result in user benefits.

229. PanAmSat's high power satellites will provide a greater "throughput" than INTELSAT can provide using a comparable earth segment configuration. Also, in addition to the greater power capability of its proposed satellites, ISI's proposed reuse of the 11-$^{12}/_{14}$ GHz spectrum resource would, alone, permit approximately twice the "throughput" of INTELSAT's most efficient satellite in that band. And as we have found above, all of the applicants have proposed to use facilities with an EIRP capability greater than INTELSAT facilities, permitting them to offer services employing smaller earth stations or at higher information transmission rates. In this sense, all of the applicants will be efficient.

230. We, therefore, conclude that separate systems can serve the specialized needs of users in a fashion that makes efficient use of the orbit/spectrum resource. We find that economic incentives can play a major role in promoting efficient use of the orbit/spectrum resource. For example, they will best govern an operator's (or user's) determination as to whether the additional satellite EIRP that will be provided by the separate systems should be used to provide services to smaller earth stations, or to accommodate more channels of communication or higher information transmission rates for one or more customers. However, we also believe that certain minimal efficiency criteria should be applied to

separate systems that we authorize. We expect that applying these criteria will be in the interest of the satellite operators, by ensuring that orbital positions will be available for new entrants in the future and that state-of-the-art facilities are used. At the same time, the criteria will promote orbit/spectrum efficiency generally. We discuss our minimal technical standards below.

D. Licensing Policies

231. We have accepted for filing and have received comments on the six applications for the construction and operation of international satellite systems that are described in paragraphs 6 through 11 above. On June 6, 1985, we decided to "freeze" the acceptance of any newly filed applications or amendments to applications for new space stations (including applications for domestic-fixed satellite service) which request orbital positions between 30° West Longitude and 60° West Longitude in the 4, 6, 11, 12 and 14 GHz band. In this proceeding, we are adopting licensing policies for processing all international satellite applications now before us and any additional applications that may be filed in the future. These policies are similar to our domestic satellite licensing policies except in certain instances where circumstances require divergence from domestic policies. Based on these policies, we are today conditionally authorizing three proposed systems and deferring action on two applications pending modification by the applicants to bring the applications into compliance with the licensing standards that we are adopting today. We are granting conditional authorizations to ISI, PanAmSat and RCA Americom and deferring action on the applications of Orion and Cygnus. We will act on the Finansat application at a later time. We are lifting the freeze at this time for the limited purpose of accepting amendments to the Orion and Cygnus applications consistent with our findings. We are delegating authority to the Chief, Common Carrier Bureau, to lift the freeze at a later date and to establish procedures for the acceptance of additional applications.[151]

1. Legal Qualifications

232. We shall require applicants to submit such information as may be necessary to determine legal qualifications to become Commission licensees. For this purpose, we are requiring separate system applicants to file with their applications the Common Carrier and Satellite Radio Licensee Qualifications Report (FCC Form 430) which requests the minimum

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[151] Our delegation of authority also gives the Bureau Chief discretion to lift the freeze for the limited purpose of accepting for filing amendments to existing applications (those applications discussed in paragraphs 6 through 11, *supra,*) as may be required to carry out the policies that we are establishing today.

information that we believe is necessary to make a determination as to legal qualifications. Since separate system operators will be non-common carriers, Section 310(b) of the Communications Act will not apply. Therefore, separate system applicants need not respond to those questions in Form 430 requesting information required by Section 310(b). We reserve the right to request additional information as may be necessary.

2. Financial Qualifications

233. In assessing an applicant's ability to construct, launch and operate an international satellite system, we must consider the applicant's financial competence or qualifications. Close examination of an applicant's financial qualifications principally ensures that qualified applicants will not be precluded from constructing and operating proposed systems by a grant of an authorization to a financially unqualified applicant. Further, a determination of an applicant's financial qualifications ensures that the desired capacity and/or service is promptly made available. We must also consider the speculative nature of the proposed international separate satellite systems and the various obstacles to be surmounted by the applicant before a license is issued by the Commission. Thus, the applicant must demonstrate its financial preparedness to assume the costs and liabilities involved in constructing, launching and operating the system for one year. The applicant must show financing currently available for the planning, construction, launch and operation of the proposed system as well as the income or revenues anticipated from the operation of the system. The financial qualifications required for obtaining a license are in addition to the various requisites of the application process.

234. We will permit an otherwise qualified applicant to begin construction of its proposed system only upon demonstration of (1) the estimated costs of proposed construction and launch, and any other initial expenses for the proposed space station(s); (2) the estimated operating expenses for one year after launch of the proposed space station(s); and (3) the applicant's current financial ability to meet both the costs of construction and launch and operating expenses for one year after launch. However, the fact that the applicant must undergo the INTELSAT consultation process and the resulting continued uncertain status of the application pending this process means that the applicant is unlikely to receive from any banking or financial institution irrevocable financial commitments until consultation process is completed. Also, where the estimated costs of the proposed satellite systems average approximately $240 million, it is understandable that firm financial support for such systems be demonstrated only after this process is completed. The applicant, therefore, will have much difficulty in showing in its initial application proof of firm financial commitments on either a short-term or long-term basis. Howev-

er, we believe that issuance of some kind of preliminary authorization is necessary for an applicant to obtain foreign authorization of its proposed system — a condition precedent for U.S. initiation of the Article XIV(d) consultation process. In addition, the applicant will have difficulty in locating customers for its proposed capacity and/or services absent both a construction permit and successful completion of the Article XIV(d) consultation process.

235. In light of these complicating factors, it is impractical for an applicant to submit to the Commission in its initial application more than general estimations of income or revenue from the operation of the proposed system. We therefore have decided to adopt a two-stage approach to determining the financial qualifications of the applicant.[152] In the first stage, we will issue a conditional construction permit if the applicant meets specific minimal financial qualifications. The applicant must show: (1) the estimated costs of proposed construction and launch, and any other initial expenses for the proposed space station(s); (2) the estimated operating expenses for one year after launch of the proposed space station(s); and (3) the source(s) or potential source(s) of funding of the proposed system for one year, which would include the identity of financiers and their letters of financial interest. Any applicant which has not met these minimal qualifications will be given 45 days to do so following the issuance of this order. Failure to comply will result in denial of the application. The conditional construction permit that is issued in this first stage to applicants meeting these minimal financial qualifications does not permit the applicant to begin construction, but is intended to set forth the approved technical parameters of the proposed system for the purpose of INTELSAT technical coordination under Article XIV(d). The Commission will issue an order permitting construction by the applicant only upon a showing of the applicant's current financial ability to meet the costs of construction and launch, and operating expenses for one year after launch. A demonstration of current financial ability to meet such costs and expenses would include the submission of a balance sheet, verified by affidavit, shall demonstrate its current financial ability current for the latest fiscal year and documentation of any financial commitments reflected in the balance sheet together with an exhibit demonstrating that the applicant has current assets and operating income sufficient to meet its estimated construction, launch and operation costs and expenses. For newly established entities unable to submit a current balance sheet, these applicants shall submit an exhibit indicating the estimated income or

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[152] We have not adopted a two-stage approach to determining the financial qualifications for domestic satellite authorizations. However, no INTELSAT economic coordination is necessary for domestic systems. The only reason for our two-stage approach here is the uncertainty caused by the INTELSAT Article XIV(d) consultation process.

revenues anticipated from the proposed operation of the satellite system necessary to meet the estimated costs of construction, launch and operation along with any additional information requested by the Commission, which would include scheduled debt financing or stock issues, established lines of credit or other forms of internal financing. If the applicant is owned by more than one corporate parent, it must submit evidence of a commitment to the proposed satellite program by management of the corporate parent upon whom it is relying for financial resources. The applicant must meet these requirements no later than 60 days following receipt by the Commission of the State Department's letter stating that the United States has fulfilled its obligations under the INTELSAT charter and that the Commission may proceed with final authorization of the proposed system. At that time, we will issue an order permitting the applicant to begin construction. However, we also will permit otherwise qualified applicants to begin construction prior to receipt of the State Department's letter if the applicant can satisfy the second stage requirements prior to that time.

236. Should the conditions of the second stage not be timely satisfied, or untimely satisfied without good cause shown, the conditional construction permit will become null and void and the orbital locations tentatively assigned to the applicant will become available for reassignment. Once either the conditional construction permit or Commission order permitting construction by the applicant is issued, the applicant bears all risks and liabilities in commencing construction of its satellite system pending final Commission issuance of launch authority and a license to begin operation.

3. Technical Standards

237. In our Notice, we stated that some variation on the orbital-spacing, full-frequency-reuse and transponder-power standards that we apply to domestic satellite systems could be appropriate for separate international systems in order to allow for the greatest number of satellites in the geostationary-satellite orbit and the greatest efficiency of those satellites. The comments we received on this issue treated it very generally.

(a) Comments

238. Orion believes the Commission should apply standards to separate satellite systems similar to those for the domestic fixed-satellite service, to the extent compatible with international treaty constraints on frequency use.

239. Cygnus agrees that technical standards should be implemented to allow for the greatest number of satellites in the geostationary orbit and the greatest efficiency of those satellites, but adds that the domestic satellite standards should not be applied directly and, instead, should take

into account the peculiar characteristics of the proposed international systems. Cygnus contends that it has designed its proposed system in such a manner as to maximize orbit/spectrum efficiency and that its application contains discussions and analyses that should assist the Commission in establishing and applying standards. Cygnus has determined that a 2° separation between its own two satellites and a 2.5° separation from other satellites are sufficient to ensure efficient utilization of the orbital arc. Cygnus states that its spacecraft would employ linear orthogonal polarization and would reuse the uplink frequency band.

240. RCA states that its SATCOM VI satellite (the one from which it proposes to provide international service) has already been designed to meet all of the Commission's domestic satellite technical standards and contends that all of the applicants should conform to those standards.

241. ISI concurs in the Commission's view that standards regarding utilization of the spectrum orbit resource would be useful. But due to the complexity of the matters involved and the convening of the World Administrative Radio Conference on the use of the geostationary orbit (WARC-ORB (1)) in August of 1985, ISI believes that it would be inappropriate and untimely to address the use of the domestic standards for international systems in this proceeding. Instead, ISI recommends that the Commission give the matter further consideration after WARC-ORB (1).

242. PanAmSat states that technological advances, such as low-cost earth station antennas which meet or exceed the Commission's sidelobe requirements, should definitely play a part in the authorization of new satellite systems and the evolution of existing systems.

243. Finally, Comsat claims that the United States will have to seek the cooperation and support of other countries in the Americas and elsewhere for any large-scale use of the orbital arc for separate satellite systems to serve U.S.-Europe routes, and that this might have to include the development of even stricter technical standards than those resulting from 2° spacing.

(b) Orbital Spacing

244. With respect to orbital spacing criteria, we will extend our established policies of reduced orbital spacing to separate satellite systems that we authorize. While Cygnus appears to suggest that a 2.5° spacing between satellites of different systems (with 2° spacing between satellites of the same system) would be a sufficiently close spacing, the other commenters did not suggest that the 2°-spacing criteria we are implementing for U.S. domestic satellites would be inappropriate or unacceptable for international systems. Our commitment to the efficient utilization of the geostationary orbit and the accommodation of the

requirements of all countries, including additional U.S. requirements, for access to the orbit is too great to not use these criteria. Therefore, we are adopting the general policies and standards for the separate systems that we have developed to reduce the spacing between domestic satellites to 2°.[153]

245. We recognize that we cannot apply such standards unilaterally because their implementation is subject to international coordination requirements. However, we will apply our 2° criteria to spacing between U.S. satellites, and we will be encouraging the acceptance of spacings as small as 2° by administrations with which we will be coordinating, as circumstances warrant. Obviously, if bilateral or multilateral discussions between the U.S. and other administrations result in an agreement to have a spacing greater than 2°, U.S. operators will be permitted (and required) to position their satellites such that the greater separation is maintained between their space stations and those of the other affected administration(s).[154]

246. With respect to orbital spacing criteria as they apply to earth stations, we will continue to apply the requirements of Section 25.209 of our Rules, 47 CFR 25.209 (1984), to all earth stations licensed in the U.S., including those licensed for communicating with international satellites. These antenna sidelobe requirements will continue to be a valuable means of meeting our objective of reduced orbital spacing.

247. Finally, we note that there is an ongoing review by our satellite spacing Advisory Committee of the precise criteria that should be used in meeting our objective of reduced orbital spacing.[155] Therefore, we will take the findings of the Advisory Committee into account as we further establish the criteria we will apply to the spacing of international satellites.

(c) Full Frequency Reuse

248. With respect to full frequency reuse, we have decided to adopt a variation from the domestic satellite service requirements and to establish an additional requirement for certain satellite configurations. In *Reduced*

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[153] *See* Reduced Orbital Spacing, *supra* n. 150. Also, consistent with our standards for domestic satellites, we will require that international space stations maintain station-keeping tolerances of ±0.1°, or better.

[154] In order to improve operational coordination and, thereby, successfully reduce spacings between the separate international satellites and either satellites of foreign countries, or other U.S. satellites, we will in the future, impose reporting requirements similar to those that exist for domestic satellite operators. We may also require the submission of additional information regarding the technical or operational aspects of a proposed system in order to complete international coordination of the system.

[155] *See* Order Establishing Advisory Committee on Reduced Orbital Spacing, FCC 84-488 (released January 15, 1985).

Orbital Spacing, the Commission set forth its full frequency reuse standards for domestic satellites in terms of a satellite's capacity.[156] The Commission required that a 4/6 GHz space station have a capacity equivalent to that which could be provided by a space station having transponders that use 864 MHz of a 1000 MHz (with two-times frequency reuse) assignment and provide a total power of 192 watts. A 12/14 GHz space station is required to have a capacity equivalent to a space station having transponders that use 860 MHz of a 1000 MHz (with two-times frequency reuse) assignment and provide a total power of 400 watts. These "performance" standards were based on certain assumptions concerning the characteristics of a reasonable state-of-the-art space station. We believe that similar standards must be applied to the separate international satellite systems in order to ensure the most efficient use of the orbit/spectrum resource. However, we have decided that, due to the additional complexity (use of multiple beams and use of different frequency bands in different beams) of international satellites, we must identify the underlying assumptions from our domestic "performance" or "capacity" standards and apply some of them explicitly to international satellites as technical standards.[157]

249. The first aspect of the requirements we are adopting from the domestic service concerns the use of transponder configurations that ensure that the actual bandwidth available for use on a satellite is a reasonable percentage of the assigned bandwidth. Based upon the assumptions used for our domestic standards, we have decided to require that each space station of a separate international system be equipped with transponders capable of using at least 860 MHz of each 1000 MHz assignment in any band. These figures assume the reuse of assigned frequencies by polarization discrimination, as discussed below. An applicant must make a compelling demonstration by request for waiver that this standard should be modified to some extent to accommodate a special situation.

250. The second aspect of the requirements we are adopting from the domestic service is that of having satellite operators employ polarization discrimination in order to reuse both the uplink and downlink frequency bands. The domestic standards are based on the assumption that each frequency will be used twice in a given beam. In all but the most extraordinary of circumstances, the domestic "capacity requirement" can

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[156] Reduced Orbital Spacing *supra* n. 150.

[157] The Commission stated in Reduced Orbital Spacing that "[i]f comparative evaluation becomes necessary, orbit and spectrum efficiency is likely to become the critical criterion (sic) in any administrative selection among competing applications." Reduced Orbital Spacing, *supra* n. 129. We are explicitly adopting this policy for cases involving international satellites as well.

only be met by the reuse of all frequencies by polarization discrimination. Because the international satellites, by their nature, will employ multiple beams and, in some cases, will employ different frequency bands for the uplinks or downlinks in different beams, the "capacity" requirement becomes ambiguous and difficult to apply. Therefore, to accomplish our goal of requiring efficient use of the orbit/spectrum resource, we are setting forth the reuse-by-polarization-discrimination requirement explicitly for the separate international satellites.[158]

251. The commenters did not express any objections to such a requirement. We also note that all of the applicants have proposed to employ linear orthogonal polarization in all beams. Cygnus, which has proposed not to reuse its downlink frequency assignments (even though it would use linear polarization in its downlink beams), offered no reason why we should not require full frequency reuse in both directions other than to state that such standards "... should take into account the peculiar characteristics of the proposed international systems."[159] Our firm commitment to efficient utilization of the geostationary orbit and the space-service frequency bands makes adoption of a requirement for frequency reuse by polarization discrimination essential. As we noted above, however, we will take the findings of our Advisory Committee into account in the respect that cross-polarization may affect satellite spacing.

252. With respect to the remaining underlying assumption of our domestic requirements, that of minimum transponder power, we have decided not to adopt an explicit standard. Our evaluation of the applications we have received thus far leads us to believe that such a standard is unnecessary at this time. To the extent permissible by the power flux-density (PFD) limits of the international Radio Regulations,[160] all of the applicants have proposed to use transponders which meet or exceed the state-of-the-art standards which underlie our domestic requirements. In fact, two of the applicants have proposed to employ transponders with such a high power capability that we have tentatively determined that they can not be fully used without violating the PFD limits of the Radio Regulations.[161] Therefore, although we will expect applicants to use transponders with a state-of-the-art power capability (to the extent

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[158] In order to implement 2° spacing, we may require in construction permits that certain polarizations be used on particular frequencies in particular beams. To the extent that any individual satellite would not conform to a polarization plan, the licensee will be required to perform necessary coordination to ensure that operation of its satellite will not cause unacceptable interference to adjacent satellites.

[159] Comments of Cygnus at 14.

[160] Radio Regulations (Geneva, 1979).

[161] *See* Memorandum Opinions and Orders in the matters of the applications of Orion Satellite Corp., File No. CSS-83-002-P, and Cygnus Satellite Corp., File No. CSS-84-002-P(LA), adopted July 25, 1985.

permissible by the Radio Regulations and the Commission's Rules), we will evaluate applications on a case-by-case basis in this respect, taking into account other aspects of the technical proposals that will affect spectrum/orbit use efficiency.

253. In addition to full frequency reuse by polarization discrimination as discussed above, we are setting forth a new reuse requirement that we will apply to separate international systems. We will require satellites serving widely separated geographic areas (without serving intervening areas in the same bands) to be capable of simultaneous operation on all assigned frequencies in all beams (both uplink and downlink). In other words, we will require that satellites be configured so that all frequencies and both polarizations can be reused in beams serving widely separated areas. This is possible due to the space station antenna discrimination that can be achieved when different beams serve areas that are widely separated. We will not require that a satellite actually use the same frequencies in all beams. We will only require that if an applicant requests assignment of a frequency band for a particular beam that the space station be configured so that all of the assigned frequencies can be used in that beam at the same time they are being used in other beams; and if the applicant does not request assignment of a frequency band for a particular beam then that band can be used in the particular direction by another space station.

254. In the case of the proposed transatlantic satellites, for example, one of the applicants (ISI) has proposed to construct its space station in a fashion that will meet this standard. By taking advantage of the space station antenna discrimination that is possible because of the wide separation of the American and European service areas, ISI will reuse each frequency and both polarizations in its two uplink beams and thereby achieve four-times frequency reuse. The resultant effective bandwidth of an ISI satellite from a single orbital position will therefore be 2000 MHz. By contrast, two of the other applicants, Orion and Cygnus, have proposed satellites that would only permit the use of an uplink frequency in one of their two beams at a time. This means that the total information flow through those satellites will be limited by an effective bandwidth (taking into account polarization reuse) of 1000 MHz — half that of the ISI satellites. Moreover, since the type of configuration proposed by Orion and Cygnus envisions the changing of frequency use from one beam to another at will, it would be impossible for another satellite operator to determine which frequencies would be left unused by Orion and Cygnus in a given direction, at any given time. Therefore, that spectrum would be useless to such an operator (either from the U.S. or another country) that could otherwise collocate (or closely space) an additional satellite at the particular orbital positions and provide services using that spectrum.

255. We recognize that a requirement for frequency reuse by space station antenna discrimination has a profound effect upon satellite design considerations. In particular, if a band of uplink frequencies is reused in this fashion on a spacecraft, the number of transponders aboard the spacecraft would have to be doubled. However, in general, we would expect the attendant increase in satellite capacity to be in the satellite operator's interest at the same time that it improves the efficient use of the geostationary orbit. Nonetheless, we realize that this type of frequency reuse may be impossible or inappropriate for some systems. Therefore, we will examine applications on a case-by-case basis, and we will require that any applicants proposing not to employ such reuse demonstrate clearly why such reuse criteria do not or should not apply to them. In such cases, we will also expect a showing as to whether other orbit/spectrum conservation measures could be employed in place of the frequency reuse standard we are adopting.[162]

(d) Application of Standards to Low Capacity Beams

256. In cases where an applicant proposes to devote a portion of its satellite capacity to serving an area outside of its primary service area by the use of a separate, "low capacity" beam, or a beam that is either switchable or movable, the full-frequency-reuse standards we are adopting may present an unreasonable burden. One of the applicants has proposed a network which we believe falls into this category. RCA has proposed to modify its Satcom VI spacecraft in order to allow it to switch, at will, six transponders with vertically polarized downlinks from its CONUS downlink beam to a downlink beam covering parts of Europe and Africa. RCA would also be able to switch these six transponders and six other transponders (all of the spacecraft's transponders with horizontally polarized uplinks) from a CONUS-only uplink beam to an uplink beam covering CONUS, and parts of Europe and Africa. Clearly, this proposed arrangement would violate our full-frequency-reuse standards. When the

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[162] We note that a configuration of the type proposed by Orion and Cygnus would permit a satellite to be switched from international use to primarily "domestic" use (i.e., signals originating in North America only being downlinked to North America and signals originating in Europe only being downlinked to Europe) with a minimum economic penalty in relation to the original construction costs of the satellite. Such considerations are not an adequate justification for a waiver of our full-frequency-reuse standards. Furthermore, we consider many of the orbital positions requested by the applicants to be critical, limited resources for the provision of particular international services. Therefore, we will retain jurisdiction over the assignment and use of orbital positions for international services to assure that their use is consistent with our general orbital assignment policies. In addition, if a separate satellite operator should desire in the future to provide primarily "domestic" service from its space station, it must comply fully with the application and authorization procedures established for domestic satellites.

Europe-Africa beams would be turned on, those beams would not reuse frequencies by either polarization discrimination or space station antenna discrimination. In addition, those beams would not make full use of the frequency assignments made to the system.

257. Nonetheless, we believe that space station beam configurations which provide satellite capacity on a temporary or ancillary basis to locations outside the primary service area of a satellite are useful for providing services or connectivities that otherwise might not be available. Therefore, we believe a flexible approach to this issue is desirable. However, we must balance the desirability of a flexible approach with our interest in maintaining efficient use of the orbit/spectrum resource. We have decided that this balance can be struck by permitting international satellite operators to configure their space stations with such beams, but only at the risk that we may determine in the future that those beams must be repositioned, reconfigured or turned off in order to permit the accommodation of an additional full capacity space station. In other words, we will not reserve a frequency assignment to a particular service area, from a particular orbital position, for a low capacity beam, if those assignments are needed to implement a full-capacity satellite of a U.S. operator or an operator representing another country.

(e) Conclusion

258. As we have stated, we have a strong commitment to maintaining efficient use of the orbit/spectrum resource. We believe that the standards we are adopting today achieve this goal without unduly hindering satellite operators in the development of systems that meet the interests of themselves and their customers. Yet, we also recognize that the environment we are dealing with is changing constantly. The state of the art of satellite communications is evolving rapidly. Therefore, we will entertain showings by applicants that particular satellite configurations which do not meet the standards we are adopting should be permitted. However, we will hold such showings to the test that the satellite will perform at least equivalently to a satellite operating within our technical standards in terms of orbit/spectrum efficiency and satellite capacity. We also note that more and more companies and countries are expressing interest in establishing satellite networks. The upcoming World Administrative Radio Conference on the use of the geostationary-satellite orbit may change the international regulatory procedures under which we cooperatively work with other countries. Therefore, we may also find it appropriate to give the matter of technical standards further consideration in a separate proceeding at a later date. In the meantime, we believe that the standards we have set forth here will prove adequate for evaluating applications that come before us.

4. Orbit Assignment Positions

259. As we have discussed, the congestion in certain portions of the orbital arc, particularly over the Atlantic Ocean, has become fairly significant. This will inevitably raise issues as to the best means of making orbital assignments to international satellites. We have decided to extend many of our general domestic satellite orbital-assignment policies to the separate international systems.[163] We will adopt our domestic policies designed to deter the filing of speculative applications and to permit the Commission to make assignments that will lead to the most efficient use of the spectrum/orbit resource.

260. In particular, we will permit an entity to initially apply for only two orbital positions in a given band for international satellites. In the *1980 Assignment Order*, the Commission determined that two positions were reasonable under the circumstances and more than sufficient to establish a reasonably competitive market presence when the satellite operator had little or no firmly demonstrated traffic commitments. We believe this also to be the case for the separate international satellite operators. In a case where an applicant desires orbital assignments for an international satellite as well as a satellite in the domestic fixed-satellite service, we will only permit applications for a total of two satellites for both services. The applicant will have the choice of providing both domestic and international service on one or both satellites, or providing one type of service on one satellite and the other type of service, or a combination of services, on the other. However, we cannot permit one type of application to be used as a pretense to gain the assignment of more than two positions initially for a given type of service. In the case of an applicant proposing to provide international service to more than one region of the world, and where those regions are so widely separated that more than one satellite must be used to provide the proposed service (e.g., one satellite placed over the Atlantic to provide transatlantic service and one satellite placed over the Pacific to provide transpacific service), we will entertain a showing from the applicant that it should be permitted initially to build and launch more than two satellites.

261. We will also adopt the policy from the Report and Order in CC Docket No. 85-135 and the *1980 Assignment Order* and not assign any additional orbital positions to an operator for international "expansion" satellites until there is a showing that "... in-orbit satellites are essentially filled and that an additional orbit location is needed to satisfy firm customer growth requirements, including reasonable protection requirements."[164] In cases where a single satellite is used to provide both

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[163] *See* Report and Order in CC Docket No. 85-135, (adopted July 25, 1985); Reduced Orbital Spacing, *supra*, at para. 80-86; 1980 Assignment Order, *supra*, at 600-605.

[164] 1980 Assignment Order, *supra*, at 603.

international and domestic service, we will apply this requirement individually to each type of service. That is, capacity dedicated for each service must be essentially filled before an authorization will be made for an expansion satellite.

In *Reduced Orbital Spacing*, the Commission stated:

> We will also require that in-orbit satellites maintain reasonable fill as represented in the applications. We have previously indicated that the availability of in-orbit spare capacity will be limited to reasonable amounts. Under current circumstances, the upper limit on in-orbit spare capacity for any space station licensee will be set at the equivalent of one spare satellite used for occasional or preemptible services within the system. If an operator fails at any time to demonstrate that its representations in its launch application(s) regarding traffic fill has been in fact achieved, we will consider the unfilled satellite as an excess spare. This will result in the termination of the orbital assignment. If the unfilled satellite has in fact been launched, relocation will be required if necessary to accommodate another satellite[165]

We will apply this standard to international satellites that we authorize. If relocation of an excess spare is required, we may order that it be collocated with another of the operator's satellites, if necessary, to permit the accommodation of other operator's requirements. Consistent with our decision in the Report and Order in CC Docket No. 85-135, we will serve licensees with an order to show cause before any satellites are ordered to be collocated, and we will require the lightest loaded systems to be collocated first, as necessary, to accommodate fully qualified new entrants or fully justified expansion satellites.

262. As we have done in the case of domestic satellites, we will preserve our authority to make orbital assignments and to change those orbital assignments, if necessary, in response to changing conditions. The Commission has held that a domestic satellite applicant's request for a particular orbital position is not dispositive of the location that will actually be assigned. The Commission has also held in regard to domestic satellites that conflicting requests by different applicants will not give rise to comparative hearing rights. All previous orbital assignments have been made only on a temporary basis, subject to relocation on thirty days notice by order of the Commission. We consider these same policies to be essential to meet changing circumstances for the international satellites without unnecessary and costly administrative delays.

263. We noted in the *1980 Assignment Order* "... that in the satellite market, where the risks are high and the financial investments substantial, predictability and stability are desirable if investment and innovation are to be encouraged."[166] We, therefore, decided that changes in orbital assignments would only be made after we had carefully considered the public interest factors and attempted to minimize the

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[165] Reduced Orbital Spacing, *supra*, at para. 84.

[166] 1980 Assignment Order, *supra*, at 601.

adverse impact on any licensee. These considerations also apply to any international satellites that we may authorize. However, any assignment of an orbital position by this Commission will be subject to international coordination efforts, and the accommodation of future requirements of the U.S. and other countries may require a further reduction in orbital spacing or other adjustments that may require a satellite to be repositioned.[167] Therefore, while we will carefully consider the effects of requiring a satellite to be relocated to a different orbital position, we will also condition all authorizations in order to permit us to order a satellite repositioned on thirty-days notice.[168]

264. As we have done with domestic satellite authorizations, we will condition the international satellite authorizations on the successful completion of certain requirements by certain dates in order to discourage the warehousing of orbital assignments. In the case of domestic satellites we require that "... the construction of the space station begin by a specified date, be completed by a specified date, and be launched and placed into operation by a certain date."[169] We will place these same requirements on the international satellite operators. The actual dates that must be met by those operators will be specified in the Commission order that actually authorizes construction of the proposed facilities pursuant to a construction permit.[170] Failure to meet the specified dates will render orbital and frequency assignments null and void.[171]

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[167] It should be noted that in 1983, administrations of ITU Region 2 (the western hemisphere) adopted a plan for the broadcasting-satellite service that contains frequency segments that are also proposed for use by several international fixed-satellite service systems (12.5-12.7 GHz). Depending upon the orbital location selected, there exists a potential for harmful interference between these services unless the proper coordination is effected. The existence of this BSS plan will have to be considered by the Commission when making orbital location assignments for U.S. international satellite systems, as well as when making comments on the proposed fixed-satellite systems of other countries.

[168] We note that, particularly in the case of satellites providing international service, positioning of a satellite in certain narrow regions of the orbital arc may be essential to the provision of service between particular geographic locations. Likewise, the Commission has recognized in the case of domestic satellite service that certain regions of the arc are more desirable (or essential) to providing service to certain areas in the United States. Nonetheless, while we bear these factors in mind, they do not change our overall policy that orbital positions are fungible.

[169] Reduced Orbital Spacing, *supra*, at para. 82.

[170] As discussed above, the construction permits that we will initially grant to some of the international satellite applicants will not permit them to begin construction. Only when we have determined that an applicant can actually begin construction will we be able to specify the milestone dates that the applicant will be required to meet to demonstrate diligence in construction of its proposed facilities.

[171] Consistent with the 1980 Assignment Order, *supra* n. 150, we will also place reporting requirements on the operators in order to determine the status of satellite construction

(E) Summary of Conclusions

265. In this proceeding, we have considered a variety of issues that have been raised by the applications that have been filed with the Commission to construct and operate international communications satellite systems separate from INTELSAT. We have concluded that the proposed separate systems will offer substantial benefits to international communications users. Separate systems will provide users with special communications needs with currently unavailable means of packaging and transmitting information over satellite networks. Separate Systems will also stimulate technological innovation and service development, improve network efficiencies, reduce user costs, create new business and trade opportunities through improved international communications. Further, we have concluded that authorization of the proposed separate systems subject to the Executive branch service restrictions will provide reasonable assurance that INTELSAT will not incur significant economic harm. These service restrictions will protect INTELSAT's revenues obtained from supplying space segment capacity for international switched message services by prohibiting separate systems from interconnecting with public-switched networks. Public-switched services by far comprise INTELSAT's largest source of revenues. Only peripheral or "customized" services would be subject to competition between INTELSAT and separate systems. We believe that entry will stimulate the overall international satellite communications market beyond the levels anticipated by INTELSAT and that INTELSAT stands to benefit from such expansion. Entry of competing suppliers also will put pressures on INTELSAT to improve the efficiencies of its operations and provide services at minimum costs, consistent with reasonable service standards.

266. To implement the Executive branch service restrictions, we will condition the license for any separate system that we authorize to limit its operation to the provision of services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public-switched message networks (except for emergency restoration service). No communications provided over a separate satellite system's space segment may interconnect with the public facilities of common carriers to provide switched message services such as MTS, telex, TWX, telegraph, teletext facsimile and high speed switched data services. The "no-interconnection" and "sale and long-term lease" restrictions apply not only to separate system operators, but also to all levels of resellers and users of the facilities. In view of the "sale and long-term lease" requirement, separate system licensees may not operate as

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and anticipated launch dates, including any major problems or delays that may be encountered.

common carriers. Finally, we have determined the following: (1) there is no need to establish a minimum unit of space segment capacity which a separate system must provide; (2) the minimum lease period for the "long-term lease" of capacity is to be one year; (3) space segment capacity may be obtained and resold by common carriers and enhanced service providers to provide communications services not interconnected with any public-switched message network; and (4) there is no basis to establish a "sunset" date for the Executive branch service restrictions absent a finding from the Executive branch that these restrictions are no longer necessary to fulfill U.S. international obligations.

267. In addition, consistent with the Presidential determination that separate systems are required in the national interest, we will not issue a license permitting any separate system applicant to begin operating its proposed system until the United States has completed coordination of that system with INTELSAT pursuant to Article XIV(d) of the INTELSAT Agreement and we have been informed by the Department of State that the United States has fulfilled its obligations under Article XIV(d). We will review applications to determine whether the proposals: (1) are consistent with the Executive branch service restrictions and the spectrum/orbit efficiency standards that we are adopting in this decision; (2) satisfy requisite legal, financial and technical standards; and (3) otherwise are in the public interest under the Communications Act of 1934. We will issue initial construction permits to those applicants initially satisfying legal, technical and minimum financial standards. However, no applicant may begin construction until it satisfies all financial standards. Those standards must be satisfied no later than 60 days after the State Department informs the Commission that the U.S. has fulfilled its Article XIV(d) obligations. An applicant meeting all legal, technical and financial standards prior to completion of the Article XIV(d) process may begin construction upon Commission order and at its own risk. However, no license will be issued until Article XIV(d) consultation is completed and the applicant demonstrates that it has completed construction pursuant to the terms of its construction permit.

268. Accordingly, IT IS ORDERED, pursuant to Sections 4(i), 4(j), 157, 303, 308, 309, 403 and 404 of the Communications Act of 1934, as amended, 47 U.S.C. §§154(i)(j), 157, 303, 308, 309, 403 and 404 (1984), Sections 102(d), 201(c)(3), (4), (9), and (11) of the Communications Satellite Act of 1962, as amended, 47 U.S.C. §§701(d), 721(c)(3), (4), (9), (11) (1984), Section 553(b) of the Administrative Procedure Act, 5 U.S.C. §553(b) (1984), and Sections 1.412 and 1.430 of the Commission's Rules and Regulations, 47 C.F.R. §§1.412, 1.430 (1984), that applications for international communications satellite systems separate from INTELSAT

SHALL BE SUBMITTED in accordance with the standards, restrictions and requirements specified in this decision.

269. IT IS FURTHER ORDERED that this Report and Order is immediately effective on release of this document since it serves to relieve restrictions on separate satellite systems providing international communication services. To the extent this Report and Order imposes additional requirements, the applicants are granted 45 days in which to file amendments so that their applications comply with the requirements, unless a different schedule has been otherwise set out in the Report and Order. See 5 U.S.C. § 553(d) (1984); 47 C.F.R. § 1.427(b) (1984).

270. IT IS FURTHER ORDERED that Amb. Abbott Washburn's Petition for Leave to File Additional Comments is DENIED.

271. IT IS FURTHER ORDERED that International Satellite, Inc.'s Application for Review, filed on February 11, 1985, and Pan American Satellite Corporation's Motion to Re-Establish Fair and Reasonable Procedural Dates, filed on February 4, 1985, are DENIED.

272. Pursuant to Section 605(b) of the Regulatory Flexibility Act (P.L. 96-354), IT IS CERTIFIED, that Sections 603 and 604 of the Act do not apply because this proposed rule or policy will not, if promulgated, have a significant economic impact on a substantial number of small entities. See 5 U.S.C. §§603, 604, 605(b) (1984). The policies adopted in this proceeding will not have a significant economic impact on a substantial number of small businesses or other small entities because the Commission has not received, and does not anticipate receiving, a substantial number of applications from small businesses for authority to construct and operate satellite systems providing international communications services.

273. IT IS FURTHER ORDERED that CC Docket No. 84-1299 IS HEREBY TERMINATED.

274. IT IS FURTHER ORDERED that the Secretary shall cause a summary of this Report and Order to be published in the Federal Register.[172]

FEDERAL COMMUNICATIONS COMMISSION

WILLIAM J. TRICARICO, *Secretary*

* See FCC 85-398, dated 7-25-85, for Appendix A.

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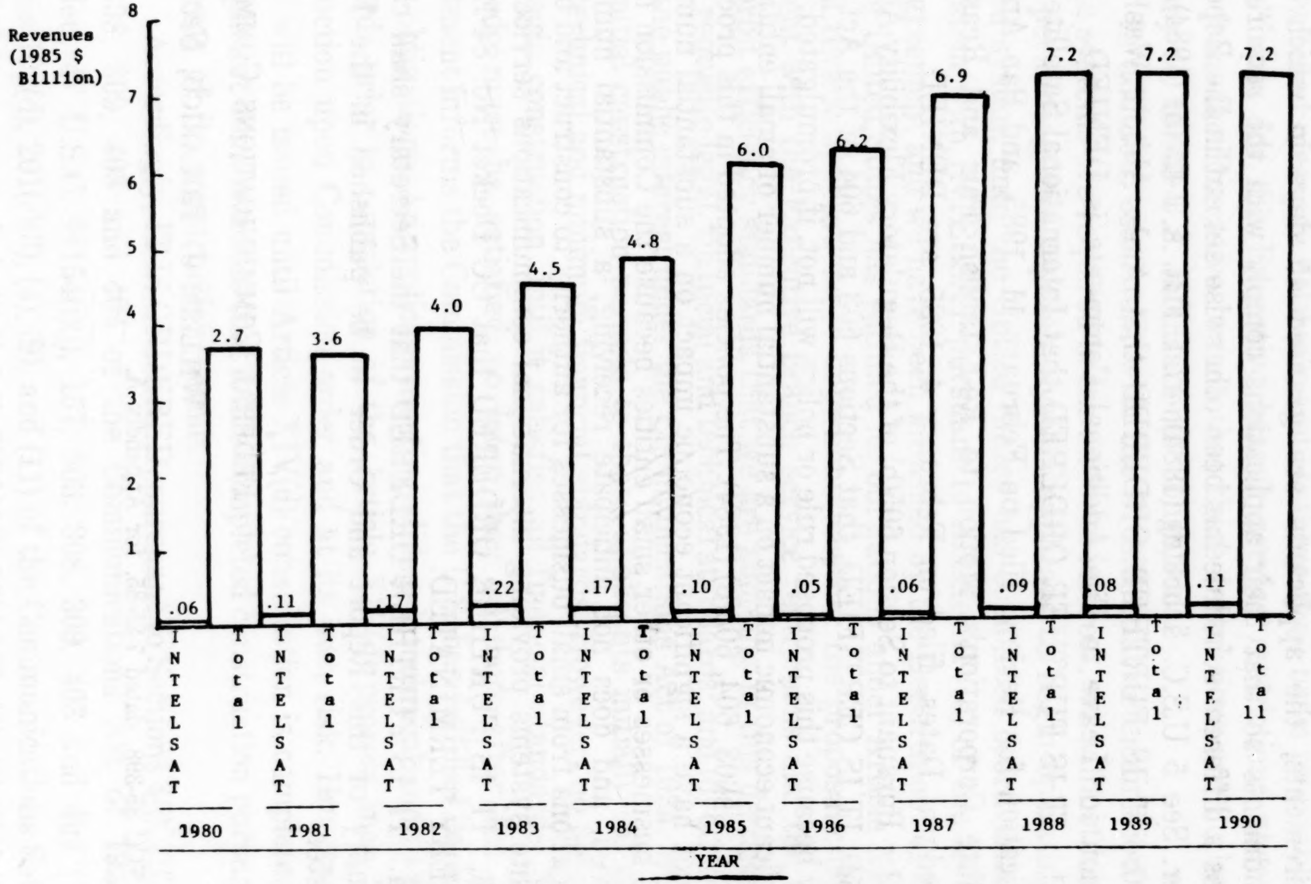
[172] We find that the summary of this Report and Order which will be published in the Federal Register will serve as effective notice to all parties under Section 553(d) of the Administrative Procedure Act, 5 U.S.C. § 553(d), and Section 1.427 of the Commission's Rules and Regulations. See 47 C.F.R. § 1.427.

FIGURE 1

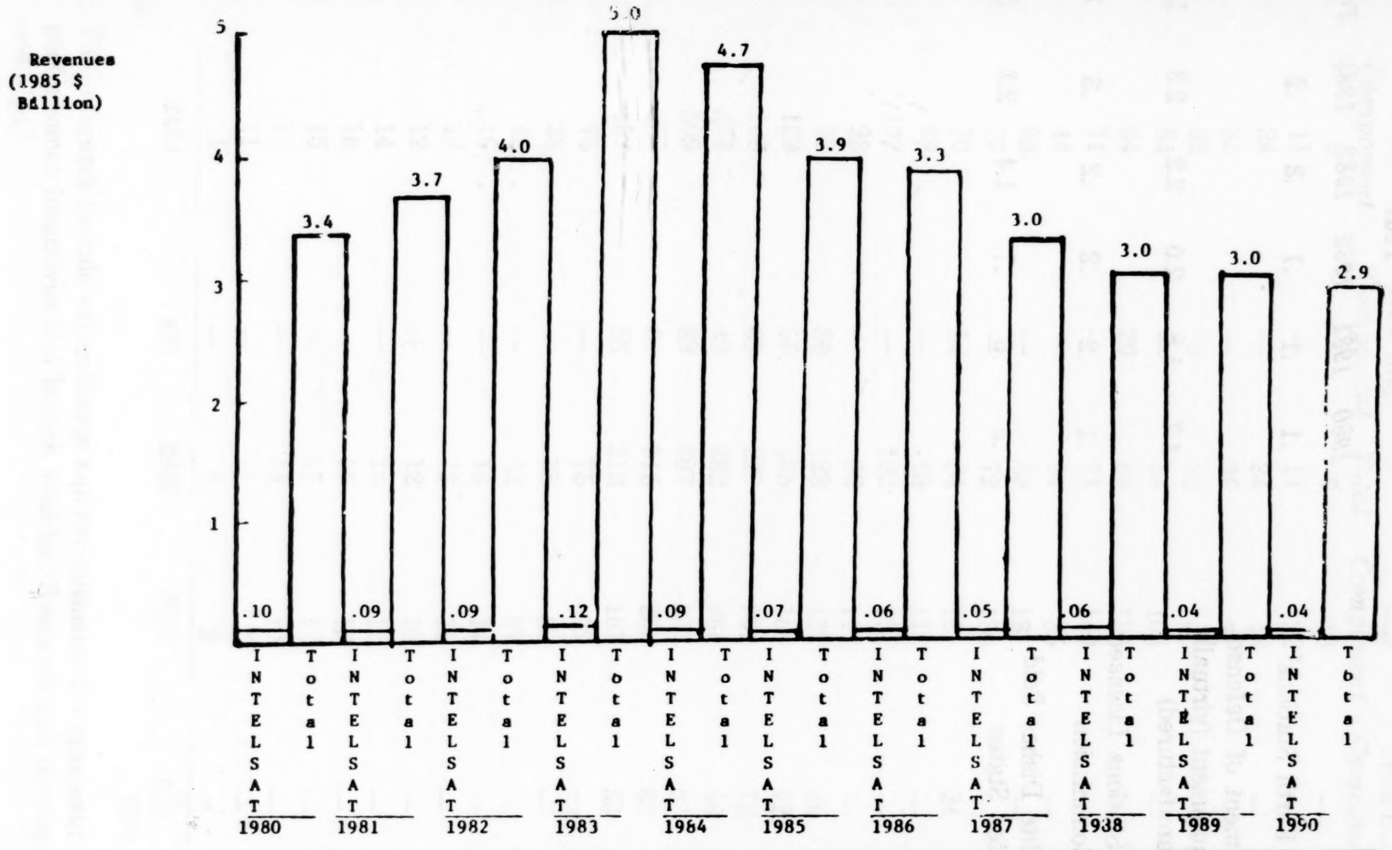
REVENUES TO U.S. FIRMS FROM THE MANUFACTURER OF INTELSAT SPACECRAFT IN RELATION TO TOTAL REVENUES TO U.S. SPACECRAFT EQUIPMENT MANUFACTURERS 1/



1/ The data comprising Figures 1 and 2 and Table 1 include equipment manufacturing revenues for all types of satellites regardless of function. The sub-industry totals contained in Figures 1 and 2 are conservative estimates, including only those manufacturing revenues for which there exist reasonable grounds in the public domain to assume that the revenues accrue to U.S. firms in each specified year.

FIGURE 2

REVENUES TO U.S. FIRMS FROM BUILDING VEHICLES WHICH LAUNCH INTELSAT SPACECRAFT IN RELATION TO TOTAL REVENUES OF U.S. LAUNCH VEHICLE EQUIPMENT MANUFACTURERS. 1/



1/ See supra, Figure 1, n.1. Note that the revenue data contained in this Figure do not include an estimated $250 million obtained during the 1980 - 1990 time frame from the manufacturing of Japanese launch vehicles. See letter to the Commission from William P. Morris, Washington Represenative, Space Systems and Diversification, McDonnell Douglas Corporation (May 30, 1985), in response to a request for information from a member of the Commission staff.

Table 1

REVENUES TO WORLD MANUFACTURERS OF SATELLITE GROUND EQUIPMENT[1]
(1985 $ Billion)

Markets[2]	*Year* 1980	1981	1982	1983	1984	*Total*
INTELSAT Earth Stations[3]	.1	.1	.1	.3	.2	.9
U.S. Department of Defense Ground Equipment (virtually all U.S. Manufactured)	1.7	1.8	2.0	2.2	2.3	10.0
U.S. Earth Stations Licensed with the Commission	.1	.2	.2	.2	.3	1.0
Home Satellite Dishes Sold in the United States	.3	.5	.7	1.4	2.1	5.0

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[1] The data comprising Figures 1 and 2 and Table 1 include equipment manufacturing revenues for all types of satellites regardless of function.

[2] Data were not available for foreign owned, non-INTELSAT ground equipment.

[3] This category includes all earth stations throughout the world which provide access to the INTELSAT system.

Table 2

REVENUES TO MANUFACTURERS FROM INTELSAT PROGRAMS INTELSAT-I THROUGH INTELSAT-VI AS OF SEPTEMBER 1983[1]

	Then Year $ Million			*1985 $ Million*[2]		
Year	*U.S. Component*	*Non-U.S. Component*	*Total*	*U.S. Component*	*Non-U.S. Component*	*Total*
1964	5	—	5	10	—	10
1965	11	—	11	22	—	22
1966	24	—	24	48	—	48
1967	35	—	36	71	1	72
1968	32	3	35	65	7	72
1969	54	—	54	108	—	108
1970	64	20	84	126	39	165
1971	71	—	71	140	—	140
1972	44	—	44	85	—	85
1973	68	—	68	131	—	131
1974	72	—	72	130	—	130
1975	70	14	84	121	24	145
1976	68	—	68	118	—	118
1977	102	—	102	171	—	171
1978	92	—	92	144	—	144
1979	93	30	123	137	45	182
1980	129	56	185	166	72	238
1981	168	61	229	201	72	273
1982	233	49	282	264	56	320
1983	309	89	397	337	97	434
1984	253	61	315	263	63	326
1985	157	53	210	157	53	210
1986	75	—	75	72	—	72
1987	38	—	38	35	—	35
1988	42	—	42	37	—	37
1989	16	—	16	14	—	14
1990	13	—	13	11	—	11
1991	12	—	12	10	—	10
1992	14	—	14	11	—	11
1993	16	—	16	12	—	12
1994	15	—	15	11	—	11
1995	14	—	14	10	—	10
1996	11	—	11	7	—	7
1997	4	—	4	2	—	2
Total	2424	436	2860	3247	529	3776
% U.S.					86%	

Note: These figures include expenditures and commitments for spacecraft, spacecraft performance incentives and launch vehicles. Research and development is not included.[3]

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[1] Derived from Richard R. Colino, Director General-Designate INTELSAT, Testimony Before the Subcommittee on Arms Control, Oceans, International Operations and Environment, Senate Foreign Relations Committee (hereinafter cited as The Colino Testimony) (October 19, 1983), Appendix 8.

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[2] Throughout this appendix, revenues will be converted from nominal dollars to constant dollars (1985=100) according to the following sources: For 1964-1984, revenues will be indexed according to the *Producer Price Index*, Code 1178 "Electronics Components and Accessories," Bureau of Labor Statistics, Department of Labor (Available through the Producer Price Index Office, Bureau of Labor Statistics, U.S. Department of Labor); for 1964 and 1965, producer prices for electronic components and accessories in 1966 will be used. For 1985-1990, revenues will be indexed according to the *Current Budget Estimates*, "Economic Assumptions-Consumer Price Index," p. 4, U.S. Office of Management and Budget (April 15, 1985). For 1991-1997, relevant only for the purposes of Table 2, revenues will be indexed based on the assumption that prices will increase 4% per year.

[3] INTELSAT budget statements on file with the Commission, *see infra*, Table 3, n. 1, indicate that total INTELSAT expenditures on research and development as well as tracking, telemetry and control (TT&C) equipment during the 1978-1984 time frame were relatively minimal when compared to its expenditures on spacecraft equipment and launching services.

Table 3

REVENUES TO MANUFACTURERS FROM BUILDING INTELSAT SPACECRAFT[1] (1985 $ Million)

Year	*U.S.*[2]	*Non-U.S.*
1978	72	—
1979	58	18
1980	62	19
1981	112	33
1982	173	39
1983	217	48
1984	173	42
1985	99	23
1986	50	6
1987	64	12
1988	91	18
1989	83	18
1990	108	18

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[1] Historical data breaking down INTELSAT expenditures on spacecraft and launching services annually were obtained from the following INTELSAT Board of Governors documents on file with the Commission: "INTELSAT Budget for 1979," BG-35-26E (November 17, 1978); "INTELSAT Budget for 1980," BG-40-29E (November 19, 1979); "INTELSAT Budget for 1981," BG-44-31E (November 25, 1980); "INTELSAT Budget for 1982," BG-48-18E (November 23, 1981); "INTELSAT Budget for 1983," BG-53-35E (November 24, 1982); "INTELSAT Budget for 1984, BG-57-24E (November 16, 1983); and "INTELSAT Budget for 1985," BG-61-33E (November 21, 1984). Projections on future INTELSAT procurement were derived from INTELSAT Board of Governors Documents, "INTELSAT Five-Year Financial Plan (1985-1989)," BG-61-44E (November 21, 1984) and "INTELSAT Longer-Term Financial Projections (1990-1994)," BG-61-47E (Rev. 1) (November 21, 1984).

[2] Estimates of the proportion of U.S. manufacturing content in INTELSAT spacecraft were obtained from INTELSAT Documents, "Addendum to Draft Contract with Hughes Aircraft Company for Procurement of Three INTELSAT IV-A Satellites," BG-1-7E (February 27, 1983), with respect to the INTELSAT IV-A program, "INTELSAT V Contract Negotiations," BG-23-10E (September 20, 1976), with respect to the INTELSAT V and V-A programs, and "Report on the Status of R&D Contracts and on Procurement Activities of INTELSAT," SG/84-4-1 (August 23, 1984) used in conjunction with a letter to the Commission from Edwin J. Martin, Vice President, International Operations, World Systems Division, Communications Satellite Corporation (hereinafter cited as the Martin letter) (March 12, 1984) (*See* FCC File No. CSG-82-011-P), with respect to the INTELSAT VI program. From these estimates, employed in combination with The Colino Testimony, *see supra*, Table 2, n. 1, we were able to derive the proportion of U.S. manufacturing content in the launch vehicles used by INTELSAT prior to the INTELSAT VI program. An estimate of the proportion of U.S. manufacturing content in the launch vehicles used for the INTELSAT VI program was obtained from BG-61-44E, *supra*, Table 3, n. 1, indicating the number of U.S. and non-U.S. launch vehicles already procured for the purpose of launching INTELSAT VI spacecraft, and the Martin letter, indicating the current price of available launch vehicle services. The proportion of U.S. manufacturing content in projected future INTELSAT procurement is assumed to equal the proportion of U.S. content in the equipment already known to be procured for the INTELSAT VI series.

Table 4

INTELSAT EXPENDITURES ON LAUNCHING VEHICLES (APPROXIMATE MANUFACTURING REVENUES GENERATED FROM THE INTELSAT MARKET)

(1985 $ Million)

Year	*U.S.*[1]	*Non-U.S.*
1978	72	—
1979	79	27
1980	104	53
1981	88	40
1982	91	17
1983	121	49
1984	90	38
1985	69	53
1986	59	23
1987	45	29
1988	57	18
1989	42	18
1990	40	18

Note: Virtually 100% of INTELSAT's expenditures on NASA's launching services are targeted at major (U.S.) aerospace firms.[2]

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[1] *See supra*, Table 3, n. 2.

[2] *See* letter to the Commission from Thomas Campbell, Deputy Comptroller, NASA (May 22, 1985) in response to a request for information from a member of the Commission staff. All NASA expenditures targeted at industry are assumed to go to U.S. firms.

Table 5

REVENUES TO WORLD INDUSTRY FROM BUILDING INTELSAT EARTH STATIONS[1] (1985 $ Million)

Earth Station Type	*Year*				
	1980	*1981*	*1982*	*1983*	*1984*
A	73	146	22	131	80
B	19	19	7	54	26
C	—	42	14	—	28
Z[2]	10	31	32	123	48
Total[3]	102	238	75	308	182

Note: An Export-Import Bank Sector, *see supra*, Table 5 n.NOTE 1, Appendix Ib, estimates the U.S. manufacturing content in INTELSAT Type A and B earth stations to be 29% and 47%, respectively.

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[1] Estimates of the average amount of revenues obtained from the manufacture of INTELSAT Standard A, B and C Type earth stations, respectively, were derived from "Sector Study-Satellite Earth Stations," Export-Import Bank of the United States (hereinafter cited as Export-Import Bank Sector Study) (June 1984). These estimates include revenues from manufacturing the antenna and tracking system, high power and low noise amplifiers, ground communications equipment (including multiplex equipment) and the ancillary and support equipment (e.g. air conditioning, power supplies, controls). Much lower estimates of the revenues obtained from manufacturing the "basic hardware" for these stations are found in The Colino Testimony, *Questions and Answers*, Question Number 11, "How much do INTELSAT Standard A, B and C Type earth stations cost?" Estimates of the numbers of each type of earth station manufactured annually are derived from INTELSAT documents on file with the Commission, entitled "Earth Station Implementation Schedule," namely: SR/84-3-3 (October 10, 1984), BG-57-11E (November 22, 1983), BG-53-11E (November 23, 1982), BG-48-11E (November 11, 1981), BG-44-11E (November 17, 1980) and BG-40-11E (November 16, 1979). Revenues from the manufacture of earth station equipment are, for purposes of analysis, attributed to the year in which the station became operational.

[2] Standard Z earth stations were designated as "Non-Standard" in INTELSAT documents prior to 1982. An estimate of the average amount of revenues obtained from the manufacture of an INTELSAT Standard Z Type earth station was derived from two letters to the Commission from H. Carlton Craddock, International Marketing Manager, SATCOM International Division, Scientific Atlanta (June 3, 1985 and June 11, 1985), in response to requests for information from a member of the Commission staff. Upper and lower ranges for the amount of revenues obtained from the manufacture of INTELSAT Standard Z Type Earth Stations were estimated in a letter to the Commission from Walter R. Hinchman, Directory Business Planning and Service Development, INTELSAT (July 1, 1985), in response to a request for information from a member of the Commission staff.

[3] Reliable estimates of the revenues obtained from manufacturing INTELSAT D, E, Standard Coast and Non-Standard Type Earth Stations were not available. Hence, no revenues from the manufacture of these stations are included in Table 5. Since only 19 of these types of stations combined were operational as of September 30, 1984, compared to 196 Standard Type A, 86 Standard Type B and 520 Standard Z stations, and since the former types of stations tend to be relatively inexpensive (*see* The Colino Testimony, *supra*, Table 2, n. 1, *Questions and Answers*, Question Number 11, "How much do

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INTELSAT Standard A, B and C Type earth stations cost?"), the omission of data on these stations should not significantly affect the "Total" revenue figures included in this Table.

Table 6

REVENUES FROM MANUFACTURING THE SPACE SEGMENT OF THE WORLD'S COMMERCIAL COMMUNICATIONS SATELLITES (EXCLUDING INTELSAT SATELLITES)[1] (1985 $ Million)

System	*Nation of Ownership*	*Minimum U.S. Share*	*1978*	*1979*		*1980*		*1981*		*1982*		*1983*		*1984*		*1985*		*1986*		*1987*		*1988*		*1989*		*1990*	
			World Total	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*
Comstar[2]	U.S.	11	11	4	4	4	4	4	4							33	35	34	36	33	35	23	24	9	10		
Westar	U.S.	22	22	22	22	19	19	14	14	14	14	12	13	26	27	27	28	42	45	51	54	72	76	53	56	39	41
Satcom[3]	U.S.	4	4	21	22	18	19	18	19	9	10	43	47	51	55	66	70	29	33	29	33	33	37	60	64	46	50
BBS	U.S.	25	25	25	25	24	24	14	14	14	14	29	30	50	51	36	37	36	37	29	30	9	9			41	43
Marces	France/ESA/ Inmarsat		5		25		25		34		29		18		10												
Aurora	U.S.			7	8	7	8	7	8	7	8			5	6	15	16	15	16	15	16	15	16	15	16	5	6
Insat[4]	India	15	15	15	15	15	15	15	15	15	15	21	22	16	16	16	16	16	16								
L-Sat (Olympus)	E.S.A.								11		11		11		11		11		11		16		24		40		50
Telstar	U.S.					12	12	25	25	36	37	35	36	25	25	23	23	11	11	22	23	22	23	20	21	27	29
Galaxy	U.S.							39	40	39	40	39	40	24	24	86	88	86	88	74	75	47	49	57	60	45	48
Palapa	Indonesia					21	21	28	29	28	29	28	29	18	18	9	9						24		35		35
Sakura[5] (CS)	Japan					7	20	7	20	7	20	7	20	5	27	5	27	5	27	5	27	5	27				
ECS	Eutelsat		11		11		21		29		29[4]		29		33		24		34		25		40		40		25
Telecom[6]	France						16		16		16		16		16		9						19		19		19
Yuri[7] (BS)	Japan									19	37	19	37	19	37	11	31		17		17		17		17		8
Telesat[8] (Anik, MSAT)	Canada	20	24	14	25	24	43	24	43	24	43	14	25	8	17	3	7				15		15		42		42
Spacenet	U.S.							28	31	28	31	40	43	40	43	18	20	10	11					8	8	16	17
Arabsat[9]	Arab States								9	32	9	32	9	32	9	32	9	32			18		18		18		18
C Star	U.S.							35	39	35	39	35	39	35	39	35	39	8	9							8	9
ASC	U.S.											17	18	17	18	17	18										
Morelos	Mexico										25	25	25	25	25	26	25	26				7	7	7	7	7	7
STW	P.R. of China										9		9		9						11		11		11		11
Aussat	Australia									35	36	35	36	35	36	35	36	10	10						25		25
SOTS[10] (Brazilsat)	Brazil									11	36	11	36	11	36	17	49	5	12	5	14	5	14				8
TDF	France										11		11		23		23		23		11		11		11		19
Tele	Sweden										9		9		9		9		9								
STC-DBS	U.S.									24	26	24	26	24	26	24	26	24	26								
Amerisat[11]	U.S.											28	31	28	31	28	31	42	45	29	31	29	31	29	31		

			1978	*1979*		*1980*		*1981*		*1982*		*1983*		*1984*		*1985*		*1986*		*1987*		*1988*		*1989*		*1990*	
System	*Nation of Ownership*	*Minimum U.S. Share*	*World Total*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*
Coronet	Luxembourg															35	39	36	40	15	16						
DBSC[12]	U.S.													30	32	30	32	31	33	31	33	14	15				
Colsat	U.S.															32	34	32	34	32	34						
Equastar	U.S.															32	34	32	34	32	34						
Spotnet	U.S.															68	72	103	108	104	109	56	58	46	47		
Cablesat	U.S.															39	42	39	42	39	42						
Unisat	U.K.														25		27		27		27		12		12		12
DFS[13]	F.R. Germany																										
(Postsat)															28		28		28		28						
DBS	P.R. of China														10		10		10		24		19		19		12
Italsat	Italy														11		11		11		11		6		6		6
Argensat	Argentina																21		21		21		9				
Digisat	U.S.															17	18	17	18	17	18	17	18	7	7	7	7
USSB-DBS	U.S.													23	25	23	25	23	25	23	25	23	25				
Domi-Sat	U.S.															31	31	30	31	30	31	30	31				
NEI	U.S.													20	21	20	21	20	21	20	21	20	21				
Fordsat	U.S.													19	20	80	86	80	86	80	86	80	86				
Fednet	U.S.															33	35	33	35	33	35	33	35				
ACC-DBS	U.S.															29	31	29	31	29	31	29	31				
M-Domsat	U.S.															33	35	33	35	33	35	33	35				
SDT	U.S.															31	32	31	32	31	32	40	41	16	17	7	7
AMS	Israel																31		31		31		31				
Paksat	Pakistan																		12		12		12				
CBS-DBS[14]	U.S.													24	26	24	26	24	26	24	26	24	26	24	26		
RCA-DBS	U.S.													8	9	8	9	17	19	17	19	26	28	26	28	17	19
HC-5	U.S.															25	25	25	25	24	25	25	25	25	25		
SSS-DBS	U.S.															11	12	25	27	25	27	26	28	26	28		
NCN-DBS	U.S.																	29	31	29	31	29	31	29	31		
Helvesat	Switzerland																17		17		17		17		17		
ESB	Sweden																		23		23		24		24		
Cygn	Sweden																		35		35		35		35		
Nat-Sat	Nigeria																		17		17		17		17		17
Thai	Thailand																				21		21		21		21
Kor	Korea																12		12		12		12		12		12
Erinsat	Ireland																				28		28		28		28
Antares	U.S.															22	23	22	23	22	23	22	23	22	23	22	23
Afsat	African States																						28		28		29
Nordcom	Nordcom																						12		12		14
U.S. Domsat	U.S.																							12	14	11	12
Andean	Andeansat																								25		25

		1978		1979		1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		1990	
System	*Nation of Ownership*	*Minimum U.S. Share*	*World Total*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*	*MU*	*WT*
NTT	Japan																								18		24
SCS	Japan																				9		18		18		18
Carib	Caribsat																										11
TOTAL		97	117	108	157	151	247	267	423	379	606	471	688	595	908	1161	1559	1084	1516	982	1500	794	1350	491	1069	298	807

Note: The "Minimum U.S. Share" includes only those manufacturing revenues for which there exists reasonable grounds in the public domain to assume that the revenues accrue to U.S. firms. This figure far understates total U.S. manufacturing revenues, particularly with regard to later-year satellites for which contracts have yet to be signed.

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[1] Though a series of spacecraft is often procured through more than one contract, in this Table, we have broken down revenues from the manufacture of commercial communications spacecraft on a series-by-series basis only, rather than specifying data on every procurement contract. Unless otherwise indicated, for each procurement contract analyzed in order to construct this table, we have consulted Communication 21 Corporation's *World Satellite Systems Scoreboard and Forecast*, February 15, 1985, to ascertain the name of the contractor (and, in some cases, the major subcontractor) and to estimate or project the contract value and the number of spacecraft procured. Manufacturing revenues from each equipment sale are assumed to be spread evenly between the contract year and the launch year, inclusive. Only the revenues from manufacturing satellite spacecraft are included in this table, unless the contract to procure the spacecraft also includes the manufacture of TT&C equipment, in which case the revenues derived from manufacturing this equipment are included in this Table as well. Revenues from manufacturing spacecraft for Eastern-block nations were not available and, therefore, were not included in this table.

[2] Unless otherwise indicated, for all satellites contracted to the Hughes Aircraft Company (Hughes), we have assumed that the "Minimum U.S. Share" equals the total contract value multiplied by the proportion of U.S. (as opposed to non-U.S.) manufacturing content estimated in a letter to the Commission from K. M. Castillo, Senior Contracts Administration, Commercial Systems Division, Space and Communications Group, Hughes (April 26, 1985), in response to a request for information from a member of the Commission staff. For domestic satellites in which the contractor's name is unknown, the Minimum U.S. Share is assumed to equal the total contract value multiplied by the mean proportion of U.S. manufacturing content in the domestic satellites of Hughes, Ford Aerospace and Communications Corporation (Ford) and RCA Astro-Electronics (RCA).

[3] For all satellites contracted to RCA, we have assumed that the Minimum U.S. Share equals the total contract value multiplied by the proportion of U.S. manufacturing content estimated in a letter to the Commission from Robert A. Amadio, Director, Finance, Government Systems Division, RCA (December 6, 1984), in response to a request for information from a member of the Commission staff.

[4] Unless otherwise indicated, for all satellites contracted to Ford, we have assumed that the Minimum U.S. Share equals the total contract value multiplied by the proportion of U.S. manufacturing content estimated in a letter to the Commission from Ronald J. Kasper, Manager Space Systems, Finance Department, Western Development Laboratories Division, Ford (January 15, 1985), in response to a request for information from a member of the Commission staff.

[5] To ascertain the minimum proportion of U.S. manufacturing content for this series of spacecraft, we have consulted "Japan Prepares for Next Space Phase," Aviation Week and Space Technology, March 12, 1984, p. 129-130.

[6] To ascertain the number of satellites procured in the original contract for this series of spacecraft, we have consulted "International Satellite Directory", Flight International (hereinafter cited as the 1983 Flight International Satellite Directory), May 14, 1983, p. 1323. We assume that the price of the spare Telecom satellite is identical to the price of the other satellites included under the same contract.

[7] Communication 21 Corporation's *World Communications Satellite Market Characteristics and Forecast* (hereinafter cited as the 1983 Communications 21 Forecast), November 1983, p. 88, estimated the proportion of non-Japanese manufacturing content in the satellites designated as "BS-2a" and BS-2b" to be 71%. Since General Electric Corporation is the major subcontractor on this contract, which went to a Japanese firm, we have assumed that the minimum proportion of U.S. manufacturing content in these satellites is 50%. The contractor and major subcontractor remained the same for the "BS-

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2c" satellite, so we have assumed that this latter satellite contains the same Minimum U.S. Share as do the two earlier BS satellites.

[8] We have used a projection of Telesat Canada's future procurement plans contained in a letter to the Commission from H. A. McGuire, Director, Corporate Services, Telesat Canada (April 30, 1985), in response to a request for information from a member of the Commission staff. To calculate the minimum proportion of U.S. content for the Anik C sub-series of satellites, we have consulted a Hughes "Executive Summary" (for general publicity) on the Anik C sub-series. According to the 1983 Communications 21 Forecast, *see id.*, p. 93, the Anik D sub-series of spacecraft were built by Hughes under a subcontract from Spar Aerospace, a Canadian firm. Hence, we have assumed that the minimum proportion of U.S. manufacturing content in these satellites is 40%.

[9] To ascertain the number of satellites and the contract price for this series of satellites, we have consulted the 1983 Flight International Satellite Directory, *see supra,* Table 6, n. 6, n. 18, p. 1312.

[10] To ascertain the Minimum U.S. Share and "World Total" of revenues derived from manufacturing the satellites designated as "SBTS-A1" and "SBTS-A2", we have consulted "Brazil's SBTS A1 and A2", Satellite Communications, September 1984, p. 76. The contractor and major subcontractor remained the same for the "SBTS-A3" satellite, so we have assumed that this latter satellite will contain the same U.S. manufacturing share as do the two earlier SBTS satellites.

[11] To ascertain the contract and launch dates for the satellite designated as "Amerisat A", we have consulted the 1983 Flight International Satellite Directory, *see supra,* Table 6, n. 6, p. 1312.

[12] We have assumed that the DBSC's, as another series of domestic spacecraft expected to be manufactured by Ford, will contain the same proportion of U.S. manufacturing content as do the Fordsat satellites.

[13] To ascertain the number of satellites procured in the original contract, we have consulted the 1983 Flight International Satellite Directory, *see supra,* Table 6, n. 6, p. 1322. We have assumed that the price of the spare DFS satellite is identical to the price of the other satellites included under the same contract.

[14] For domestic satellites in which the contractor is known to be other than Hughes, Ford or RCA, the Minimum U.S. Share is assumed to equal the total contract value multiplied by the mean proportion of U.S. manufacturing content in the domestic satellites of Hughes, Ford and RCA.

Table 7

REVENUES TO THE U.S. SATELLITE EQUIPMENT MANUFACTURING INDUSTRY FROM SUPPLYING SPACECRAFT UTILIZED BY NOAA[1] (1985 $ Billion)

Spacecraft Series	*Year*					
	1984	*1985*	*1986*	*1987*	*1988*	*1989*
G.O.E.S.	.05	.05	.07	.06	.05	.03
N.O.A.A.	.03	.05	.05	.06	.07	.08
Total	.08	.10	.12	.12	.12	.11

Note: All NOAA expenditures targeted at industry are assumed to go to U.S. firms. Space segment revenues only are included; revenues derived from launching NOAA spacecraft are included in the figures for NASA, see Table 8.

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[1] All figures were derived from "Fiscal Year 1985 National Environment Satellite, Data and Information Service (NESDIS) General Budget Statement" (hereinafter cited as NESDIS Budget), February 3, 1984. Annualized figures on the LANDSAT system were not available; hence no data on LANDSAT were included in this Table. For more information on LANDSAT, *see* NESDIS Budget, p. 112, 121.

Table 8

REVENUES TO THE U.S. SATELLITE EQUIPMENT MANUFACTURING INDUSTRY FROM SUPPLYING EQUIPMENT UTILIZED BY NASA, NOT ATTRIBUTABLE TO INTELSAT[1] (1985 $ Billion)

	Year											
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Launch Vehicle Equipment[2]	2.8	2.9	3.3	3.4	4.4	4.1	3.3	3.2	2.7	2.2	2.3	2.2
Space Segment Equipment[3]	1.6	1.7	1.4	1.4	1.7	1.7	2.1	2.2	2.9	3.3	3.5	3.7

Note: All NASA expenditures targeted at industry are assumed to go to U.S. firms. Expenditures on ground equipment are assumed to be minimal.

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[1] All figures were derived from a letter to the Commission from Thomas Campbell, Deputy Comptroller, NASA (May 22, 1985), in response to a request for information from a member of the Commission staff.

[2] Reimbursements for constructing the vehicles used to launch DOD satellites are excluded from this table, as they are included in the figures for DOD, *see infra*, Table 9. Also excluded are reimbursements for constructing the vehicles used to launch INTELSAT satellites.

[3] Includes space tracking systems.

Table 9

REVENUES TO THE U.S. SATELLITE EQUIPMENT MANUFACTURING INDUSTRY FROM SUPPLYING EQUIPMENT UTILIZED BY DOD[1] (1985 $ Billion)

Navigation Program[2]							*Year*			
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Space Segment Equipment	.06	.07	.08	.09	.10	.11	.12	.13	.13	.13	.14
Ground Equipment[3]	.06	.07	.08	.09	.10	.11	.12	.13	.13	.13	.14
Communications Programs											
Space Segment Equipment	.63	.68	.74	.80	.86	.90	1.00	1.03	1.06	1.09	1.13
Ground Equipment	.63	.68	.74	.80	.80	.90	1.00	1.03	1.06	1.09	1.13
Other Programs								*Year*			
	1980	*1981*	*1982*	*1983*	*1984*	*1985*	*1986*	*1987*	*1988*	*1989*	*1990*
Space Segment Equipment	1.01	1.09	1.18	1.27	1.37	1.48	1.60	1.65[4]	1.70	1.75	1.80
Ground Equipment	1.01	1.09	1.18	1.27	1.37	1.48	1.60	1.65	1.70	1.75	1.80
Launch (All Programs)[5] *Vehicles*	.39	.42	.45	.49	.52	.57	.61	.64[6]	.66	.67	.69
Total DoD											
Space Segment Equipment	1.70	1.84	2.00	2.16	2.33	2.49	2.72	2.81	2.89	2.97	3.07
Launch Vehicle Equipment	.39	.42	.45	.49	.52	.57	.62	.64	.66	.67	.69
Ground Equipment	1.70	1.84	2.00	2.16	2.33	2.49	2.72	2.81	2.89	2.97	3.07

Note: All DOD expenditures targeted at industry are assumed to go to U.S. firms.

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[1] All figures were derived from two letters to the Commission from Dennis J. Grenato, Staff Specialist, Space and Advance Systems, Office of the Under Secretary of Defense for Research and Engineering, DOD (February 14, 1985 and April 26, 1985), in response to requests of information from a member of the Commission staff.

[2] The navigation programs are assumed to provide revenues to the spacecraft and ground equipment manufacturers in similar proportion to that involving other DOD programs.

[3] Includes control systems.

[4] Real growth of 3% is assumed for the period from 1987 to 1990.

Table 10

A CONSERVATIVE (MINIMUM) ESTIMATE OF TOTAL REVENUES TO U.S. SATELLITE EQUIPMENT MANUFACTURERS FROM BUILDING NON-INTELSAT SPACECRAFT (1985 $ Billion)

Year										
1980	*1981*	*1982*	*1983*	*1984*	*1985*	*1986*	*1987*	*1988*	*1989*	*1990*
3.6	3.5	3.8	4.3	4.6	5.9	6.1	6.8	7.1	7.1	7.1

Table 11

REVENUES TO U.S. SATELLITE EQUIPMENT MANUFACTURERS FROM BUILDING LAUNCH VEHICLES (REVENUES DERIVED FROM THE LAUNCHING OF INTELSAT SPACECRAFT NOT INCLUDED) (1985 $ Billion)

Year										
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
3.3	3.6	3.9	4.9	4.6	3.9	3.8	3.3	2.9	3.0	2.9

Note: Revenues to U.S. firms from building Japanese launch vehicles are not included in these figures.

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[5] These figures include revenues from manufacturing the launch vehicles owned by DOD as well as reimbursements to the manufacturers of NASA launch vehicles for the launching of DOD spacecraft.

[6] Real growth of 3% is assumed for the period from 1987 to 1990.

Table 12

REVENUES TO WORLD MANUFACTURERS OF HOME SATELLITE DISHES SOLD IN THE UNITED STATES[1] (1985 $ Billion)

Year					
1980	*1981*	*1982*	*1983*	*1984*	*1985*
.3	.5	.7	1.4	2.1	1.8

Note: Home satellite dishes sold in the United States may be manufactured by foreign corporations. We do not possess reliable information on the overall percentage of U.S. manufacturing content in these stations.

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[1] These estimates were obtained from a letter to the Commission from Frank Moldstad, Editor, Home Satellite Marketing (May 29, 1985), in response to a request for information from a member of the Commission staff. For other estimates of the size of this market, *see* "An Eye on the Sky," Forbes, November 5, 1984, p. 196.

Table 13

REVENUES TO WORLD MANUFACTURERS OF LICENCED, U.S. DOMESTIC SATELLITE EARTH STATIONS[1] 1985 $ Million

Earth Station Type				*Year*			
Receive Only (RO)	*1978*	*1979*	*1980*	*1981*	*1982*	*1983*	*1984*
Under 6 Meters[2]	17	40	27	33	42	44	42
6-9 Meters	11	9	8	16	13	17	17
Over 9 Meters	3	4	2	2	3	2	7
Non RO							
Under 6 Meters	3	8	37	32	20	23	42
6-9 Meters	0	1	2	16	12	34	125
Over 9 Meters	30	25	66	99	99	124	104
Total	64	87	142	198	189	244	331

Note: Licensed earth stations in the United States may be manufactured by foreign corporations. We do not possess reliable information on the overall percentage of domestic manufacturing content in these stations.

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[1] These estimates were derived from consulting the "Earth Stations Applications List" and the applications to construct licensed domestic earth stations on file with the Domestic Facilities Division, Common Carrier Bureau, Federal Communications Commission. The Commission staff separated the earth stations into the six categories shown in this Table, computed the number of stations of each type placed in operation annually and, after examining the applications themselves, estimated the average amount of revenues accruing to equipment manufacturers from constructing each type of earth station.

[2] This Table classifies the size of an earth station according to the length of the diameter of its satellite dish.

CONCURRING STATEMENT OF COMMISSIONER JAMES H. QUELLO

In re: *Report and Order* regarding the establishment of satellite systems providing international communication services, CC Docket No. 84-1299.

The use of private satellites in the international telecommunication service is consistent with the Commission's authorization of other competitive services in both the domestic and international arenas. In this case, however, it is necessary to take special care that the continued viability of Intelsat is not compromised.

I remain concerned that the restrictions adopted may not be sufficient to assure that these newly authorized facilities will be limited to providing private line services and that they will not be introduced eventually into the public switched networks. Nevertheless, because of the strengthened enforcement provisions that have been added and the assurance in the document that the Commission will take appropriate steps if experience demonstrates significant violations of these restrictions, I concur in the decision.

SEPARATE STATEMENT OF COMMISSIONER HENRY M. RIVERA

RE: Establishment of Satellite Systems Providing International Communications (CC Docket No. 84-1299)

While I have always supported the competitive thrust of this Report and Order, I was more than skeptical about the practicality of implementing the "non-interconnection" restrictions as they were initially drafted. I articulated this skepticism during the open Commission meeting at which this item was considered and reserved voting on this item until I could review the redrafted enforcement provisions. The enforceability of these restrictions is crucial to this decision because these restrictions are a major underpinning for both the Presidential determination and our conclusion that authorization of restricted separate satellite systems will not cause significant economic harm to Intelsat.

The enforcement provisions have now been significantly revised. I am now satisfied that these strengthened enforcement provisions and the Commission's unequivocal commitment to both enforcement, in general, and forceful remedial action, in particular, fully meet the requirements of the "non-interconnection" restrictions.

Common Carrier
International Satellite Systems

Commission issued a *Report and Order* regarding the establishment of satellite systems which would provide international communications services and *Memoranda Opinions, Orders and Authorizations* of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issued *Memoranda Opinions and Orders* regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.
—*International Satellite, Inc.*

FCC 85-400

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of the Application of

International Satellite, Inc.

File Nos.
CSS-83-004-P(LA)
I-P-C-83-073

For authority to construct, launch and operate a North Atlantic Region Satellite System consisting of two in-orbit satellites and one ground spare.

MEMORANDUM OPINION, ORDER AND AUTHORIZATION

Adopted: July 25, 1985; Released: September 3, 1985

BY THE COMMISSION:

1. The Commission has under consideration the captioned application, filed by International Satellite, Inc. (ISI) on August 12, 1983, seeking authority pursuant to Sections 214, 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 214, 303 - 319 (1984) to construct, launch and operate a North Atlantic regional satellite system. ISI filed on November 7, 1983, a supplement to its application and a request that the Commission advance publish its requested orbital positions with the International Frequency Registration Board (IFRB). It

filed four additional amendments to its application on December 5, 1983, May 2, 1984, December 20, 1984, and July 5, 1985.

2. The application was placed on public notice on August 19, 1983. A petition to deny the application was filed by the Communications Satellite Corporation (Comsat). Comments were filed by RCA Global Communications, Inc. (RCA Globcom), AT&T Communications, Inc. (AT&T), the American Satellite Company (ASC), Orion Satellite Corporation (Orion), and Home Box Office, Inc. (HBO); ISI filed a consolidated reply to these comments as well as an opposition to the petition to deny. Other responsive pleadings were filed by PanAmerican Satellite Corporation (PanAmSat), Comsat, Orion, the United States Departments of State and Commerce, CBS, Inc. (CBS) and Philip Trezise. Letters addressed to the Commission from various members of the United States Congress were also made part of the record as were letters from signatories to INTELSAT.[1]

I. The Application

3. ISI, a newly-formed Delaware corporation, proposes to establish a private international satellite system that would link the 48 contiguous United States (CONUS) and Western Europe. ISI proposes to provide at least 15 percent of its regional satellite capacity on a tariffed common carrier basis and sell or lease at least 50 percent of its transponder capacity on a non-tariffed basis to users on both sides of the Atlantic. The 32-transponder, 11-12/14 GHz satellites are designed to provide video, audio and data transmission services. The video and audio transmissions will entail all varieties of programming now available in the United States and Europe, and both high-speed and slow-scan video teleconferencing. Data transmissions will include TWX/telex, newswires, facsimile and electronic mail.

4. The proposed system will be positioned in the geostationary-satellite orbit at 56 degrees and 58 degrees West Longitude. Each satellite will have 32 transponders, 24 operational and 8 spare, and two antenna beams, one focused on the United States and the other focused on Western Europe, permitting separate and independent regional beam coverage of both CONUS and Western Europe. There will be receiving and transmitting channels in each beam operating in the 14 GHz and 11/12 GHz frequency band, respectively, providing 56 MHz useable bandwidth per transponder. The receivers and transmitters in both beams will be interconnected through a switch matrix that will give considerable flexibility to users by allowing the user to direct signals to be downlinked into either or both coverage areas, instead of merely into one coverage

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[1] *See* Appendix A for a list of signatories who have submitted correspondence to the Commission.

area, and to uplink sequentially or simultaneously in both coverage areas. ISI states that the frequencies to be used will be free of terrestrial microwave radio interference, thereby permitting their reception in urban areas where earth stations are proposed to be located. The satellites are designed to have a ten-year mission life and will have sufficient fuel capacity for removal from the geostationary orbit at the end of their useful lives. Operation of the satellites' tracking, telemetry and command (TT&C) system will permit the ground control center to monitor the status of the spacecraft and send commands as required. ISI states that it is now investigating possible launch dates with either NASA's Space Transportation System (STS) or Ariane vehicles.

5. ISI estimates the total projected cost of the proposed system to be $230 million, the costs divided among three satellites, estimated at approximately $40 million each, two launches, including insurance, at approximately $50 million each, and preoperational, engineering and general expenses at approximately $10 million. ISI states that it will obtain the funds necessary for the start-up operation from the corporation's initial shareholders and for long-term operation, through a debt and equity combination as well as from the financial resources of ISI's shareholders.[2]

6. ISI states that its proposal serves the public interest by advancing the United States' procompetitive policy in the international satellite market. ISI contends that such competition will have the effect of expanding technological and price competition, encouraging innovation and growth in technology, productivity and trade and stimulate new markets and services. While it recognizes that INTELSAT has developed and implemented its International Business Service (IBS), which is similar to its own proposed service, ISI avers that IBS is limited to digital modulation and will be provided on only two transponders on INTELSAT's V-A satellite. ISI states that its proposal offers new operational and connectivity features not available through INTELSAT and provides direct access to the space segment by allowing users to buy or lease their capacity to ensure their ability to communicate. The proposed frequencies will be free of terrestrial microwave radio interference, thus permitting reception by small earth stations in urban areas. ISI states that the public interest will be benefitted by the location of small earth stations at customers' premises as well as the cost savings resulting from use of such sites. ISI avers in addition that its proposal advances the United States' policy on orbital resource allocation as well as provides the Department of Defense with direct communications links with individual European

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[2] ISI includes with its application letters indicating interest in assisting ISI in funding its project from Wold Communications, Inc., United Brands Company, Prudential-Bache, Kansas City Southern Industries, Inc. and Satellite Syndicated Systems.

military installations and emergency communications capability. Finally, ISI proposes to provide service, the equivalent of one transponder's capacity, to United Nations agencies free-of-charge.

7. ISI states that its proposal complies fully with the Communications Satellite Act of 1962, as amended, 47 U.S.C. Sections 701-744 (1976) and that the establishment of alternative international satellite systems such as its own was contemplated by the Act. ISI states that the Commission held in its *Transborder Satellite Video Services* order that neither the Act nor its legislative history would preclude the grant of authority to carriers to use non-INTELSAT space segment for international services.[3] In so holding, the Commission noted the language of Section 102(d) of the Act which allows the establishment of additional satellite systems when "required to meet unique governmental needs or is otherwise required in the national interest."

8. ISI also claims that its proposal is wholly consistent with the INTELSAT Agreement in that Article XIV(d) of the Agreement recognizes the use of non-INTELSAT facilities where the separate facilities are technically coordinated with those of INTELSAT and significant economic harm to the INTELSAT system is avoided. ISI states that it will not cause INTELSAT significant economic harm as the regional traffic it proposes to carry will not divert more than 3.18 percent of INTELSAT's revenues by 1995 from the INTELSAT system. It further states its goal of developing new markets not currently, adequately, or planned to be served by INTELSAT. In addition, ISI is prepared, if necessary, to forego several years' participation in carriage of international switched message service, which it says is now the source of approximately 85 percent of INTELSAT's overall revenues. Finally, ISI avers that its proposed system is technically compatible with INTELSAT in that its use of its proposed radio frequencies and orbital locations will not interfere with the INTELSAT system.

II. The Pleadings

9. Comsat, in its petition to deny, argues that grant of ISI's application would be inconsistent with the United States' commitment to the INTELSAT system as embodied in the Communications Satellite Act of 1962 and reaffirmed in the Commission's *Transborder* order, *supra* at 4, n.3. Comsat first avers that Section 102(d) of the Act clearly places the burden of establishing an overriding national interest requirement on the proponents of separate systems and clearly contemplates a more stringent showing than the ordinary public interest standard, which Comsat claims ISI has not met. Comsat states that a departure from the

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[3] Transborder Satellite Video Services, 88 FCC 2d 258 (1981) (hereinafter referred to as "*Transborder*").

established national policy is not warranted since such a change would: (1) produce significant economic harm to INTELSAT; (2) encourage other countries to establish their own long-haul, high density intercontinental satellite system; (3) diminish the U.S. leadership role in INTELSAT and reduce U.S. credibility as a strong proponent of INTELSAT; (4) be perceived as promoting inefficient use of orbital slots and frequency spectrum and as repudiating prior U.S. efforts to promote conservation of these resources internationally; and (5) compromise U.S. efforts to discourage adoption of planned assignments of orbital slots and frequency spectrum at the 1985 and 1988 Space WARCs.[4]

10. In addition, Comsat contends that ISI fails to demonstrate that its proposed system would not impose significant economic harm on INTELSAT by putting forth speculative estimates of the percentage of traffic that its system would divert from INTELSAT. Comsat argues that (1) ISI's proposed services are all either now or will soon be available from INTELSAT; (2) ISI's proposed in-orbit FDM/FM capacity is so massive that it is unlikely that ISI designed a system with such potential without plans to actually use it, in practical terms, by diverting telephone traffic, the backbone of the INTELSAT traffic base; and (3) ISI's own offer to forego for several years AT&T's MTS traffic belies ISI's acknowledgement of the likelihood of significant economic harm to INTELSAT. Further, Comsat notes that the INTELSAT Meeting of Signatories unanimously passed a resolution espousing concern about the diversion of transatlantic traffic by separate satellite systems. Comsat subsequently filed with the Commission: (1) a November 22, 1983, letter opposing ISI's request to forward advance publication information to the International Frequency Registration Board (IFRB), claiming such action would be premature in light of the many unresolved policy issues; (2) a January 31, 1984, letter transmitting a memorandum of legal opinion prepared by the executive organ of INTELSAT at the Director General's request, dealing with the scope of the term "public telecommunications services" under the INTELSAT Agreement;[5] and (3) a June 12, 1984, letter to the Commission

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[4] ISI and Orion move to strike the comments of both Philip Trezise and the firm Wiley & Rein as they fail to comply with the procedural requirements of Section 309(d)(1) of the Communications Act of 1934 regarding the submission of documents to the Commission by parties in interest. ISI and Orion state that both sets of comments were at least indirectly funded by INTELSAT, whose members, including Comsat, have expressed opposition to the pending applications for private satellite systems. ISI and Orion also state that such submissions were made without disclosing the work had been subsidized by an interested party. ISI and Orion further argue that both filings must be rejected as informal objections as they fail to meet the minimal requirements of setting forth specific factual allegations with respect to any of the proposals for private satellite systems.

[5] ISI moved to strike this letter and attendant Memorandum as it was procedurally defective and would, as such, prejudice ISI's rights. On March 1, 1984, Comsat opposed ISI's motion to strike the submission did not constitute an unauthorized pleading going to

from the Guatemalan and Ecuadoran signatories expressing concern over pending applications for private international satellite systems.

11. ASC objects to ISI's proposed use of the "Region 2 domestic frequency band," 11.7 - 12.2 GHz, for international services. ASC argues that international use of these bands denies the use of domestic frequencies to domestic users and thus violates the intent of the International Telecommunication Union (ITU) conventions. Also, if ISI wishes to provide domestic services using the domestic bands, ASC states that ISI's applications should be processed along with other domestic satellite applications in accordance with the Commission's *1983 Processing Order*.[6]

12. Orion contends that ISI should submit information regarding the number of transponders it intends to sell, lease or otherwise make available for non-common carrier use. Orion further requests that the Commission, in considering ISI's applications under Article XIV(d)'s "significant economic harm" standard, distinguish between the ISI transponders intended for use in non-INTELSAT common carriage and those that are intended to be conveyed to others for private use.

13. AT&T requests that, if ISI's application is granted, the Commission should state that it will not entertain any request by ISI to compel common carriers to use any spare capacity in its system. To do otherwise, argues AT&T, would be to insulate ISI from the risks of its proposed business venture. On the other hand, AT&T objects to any attempt to minimize the economic impact which ISI's proposal may have on INTELSAT based on a discriminatory moratorium on AT&T's use of ISI's system for MTS. AT&T argues that the essence of its obligation to provide just and reasonable services is based in great part on its ability to use cost effective facilities, whether they are submarine cables of its own or another manufacturer's design, satellite circuits obtained from Comsat or satellite circuits which ISI or others might provide. AT&T claims that ISI's proposal to forego carriage of MTS for a specified period of time would put it at a competitive disadvantage.

14. CBS expresses concern that the projected growth in voice and data traffic will seriously limit the INTELSAT capacity available for wide band video and associated audio transmissions at affordable prices. CBS notes that there is no assurance that INTELSAT will have sufficient transponder capacity to accommodate CBS', as well as other users', growing wide

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the merits of a contested proceeding. Comsat also stated that to the extent the submission as it was not in full compliance with the Commission's rules, the defect was remedied by the Commission placing the letter and Memorandum in the public files of the pending applications. ISI, on March 7, 1984, replied to Comsat's opposition.

[6] *See* Domestic Fixed-Satellite Service, 93 FCC 2d 1260 (1983).

band requirements when CBS' current five-year full period lease service expires.

15. In addition to these pleadings, the Commission has received many letters from foreign signatories to INTELSAT expressing concern that possible changes in United States policy regarding competing international satellite systems would not be consistent with the United States' legal commitments to INTELSAT. Generally, these letters claim that the competing systems propose to concentrate their services in the high traffic routes in the North Atlantic Basin and, in effect, receive high earnings while meeting the requirements of a small number of large users. For INTELSAT, it is argued, this would result in the loss of large traffic trunks and would significantly reduce the revenues available to meet its capital investment requirements and hold down rates throughout the world. Such a change in U.S. policy would negatively impact all users of INTELSAT, in particular, the people in small and developing countries. Also expressed is the concern that United States approval of any of the pending applications would lead to a proliferation of other U.S. satellite systems intending to carry public international telecommunications traffic in direct competition with INTELSAT which, in turn, would encourage other INTELSAT members to make similar authorizations.

16. In its opposition to Comsat's petition to deny, ISI observes as a preliminary matter that Comsat fails to satisfy the minimum pleading standards of Section 309(d) of the Communications Act of 1934, which requires that a petition to deny contain factual allegations sufficient to show that grant of the application would be *prima facie* inconsistent with the public interest. ISI argues that Comsat: (1) fails to demonstrate why it finds ISI's financial analysis and facts bearing on INTELSAT's return of investment "seriously flawed"; (2) fails to refute the national and public interest benefits ISI claims will flow from grant of its application; and (3) fails to refute ISI's claim that the services it proposes to offer are new and not currently planned to be offered by INTELSAT. In response to Comsat's claim that ISI's proposed system capacity is the "most telling indicator" of ISI's potential impact on INTELSAT, ISI states that: (1) no system can carry all of the traffic which is theoretically possible because of the inevitable inefficiencies in bandwidth and power arising from multiple access to transponders; (2) contrary to Comsat's claim, ISI would not be able to fill up both orbital spacecraft by 1987, the date of service inauguration; and (3) about 25 percent of total transponder capacity will be held on spare transponders in reserve. ISI also contends that whether future applications for separate satellites might be filed, granted and, together with ISI, cumulatively cause significant economic harm to INTELSAT is irrelevant to ISI's immediate application. ISI avers that it would be contrary to the public interest for the Commission to deny on

otherwise meritorious application on the basis of speculative claims of competitive injury, even to INTELSAT.

17. In addition, ISI argues that grant of its application would not constitute a total reversal of the U.S. commitment to INTELSAT. Rather, the United States has specifically reserved the right to proceed to approve and launch a non-INTELSAT satellite even if INTELSAT should find it would cause significant economic harm. It states that approval of its application would not exacerbate tensions involving the principles to be adopted at the 1985 Space WARC since the proposed slots can be used by other nations. ISI states that U.S. policy with regard to the geosynchronous orbital slots has been to make slots available when an immediate plan to use it is developed by any country and not to reserve slots for potential future use on an *a priori* basis. ISI also contends that whether grant of its application would lead to a proliferation of other countries' implementation of their own systems is purely speculative.

18. Finally, ISI moves to strike Comsat's January 31, 1984 letter and attendant INTELSAT Memorandum, claiming it violates Section 63.52(c) of the Commission's rules regarding unauthorized late-filed pleadings which go to the merits of a contested adjudicatory matter and would prejudice its rights. ISI argues that Comsat, by submitting an informal letter to the Chairman, seeks to inject additional material not addressed previously. ISI also claims that the letter: (1) was not concurrently served on ISI as required by Section 1.47 of the rules; (2) was not signed by counsel as required by Section 1.52 of the rules; and (3) invites the Chairman to contact Comsat for further discussion of the material addressed in the letter and its accompanying Memorandum. ISI further maintains that placing the letter and Memorandum in the ISI file does not remedy Comsat's breach of procedural regularity.[7]

19. In response to ASC's comments, ISI states that ASC's objections to ISI's proposed use of certain frequency bands is unfounded and rest on a misunderstanding of the International Radio Regulations, Footnote 839 in particular, and Commission regulations.[8] ISI further states it has requested the orbital assignments of 56 degrees and 58 degrees West Longitude because the Commission has indicated that at this time it judges the usable arc for domestic satellites to be between 60 degrees and 130 degrees West Longitude. ISI believes it would be inappropriate to treat it as a domestic applicant for purposes of the new comsat filing

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[7] ISI motion to strike (filed February 15, 1984). ISI reply to opposition to motion to strike (filed March 7, 1984).

[8] Footnote 839 of the International Radio Regulations was adopted by the Commission in its Implementation of the Final Acts of WARC 1979, First Report and Order in General Docket No. 80-739, 48 Fed. Reg. 27541 (June 16, 1983), hereinafter "WARC Implementation Order." ISI reply comments at 6-8 (filed October 4, 1983).

procedures. First, the requested orbital locations extend beyond the easternmost limit of the arc the Commission has described as domestic. Second, ISI's proposal is principally for international service with the domestic portion being secondary, and the common carrier portion of the satellite will not be tariffed for domestic service. In response to Orion's comments, ISI insists that the policy issue before the Commission is whether to approve the concept of private sales in an independent international satellite link, not the number of transponder sales to approve. ISI states that it will nonetheless be prepared to file data concerning transponder sales when contractual commitments for such sales have been made. ISI also states that regardless of whether Article XIV(d) applies to private transponder sales, it has demonstrated that its proposal would cause no significant economic harm to INTELSAT. ISI has chosen to address the merits of competitive impact because in its view the showing of non-economic harm is so persuasive. According to ISI, Orion's decision to not make a similar showing has no bearing on the merits of ISI's application.

20. In response to AT&T's comments, ISI states that it did not intend to discriminate against AT&T by offering to forego MTS service, nor did it wish to have the moratorium imposed on it by the Commission. ISI adds that with Commission consent, it would offer to sell facilities or service to AT&T. ISI assures AT&T that it does not plan to seek any regulatory umbrella with respect to "proportionate use" or traffic guarantees of any kind.

21. ISI submitted remarks in response to comments filed by both Systematics General Corporation (SGC) and GTE Satellite Corporation (GSAT) in another proceeding relating to the processing of new domestic satellite applications.[9] SGC is an applicant for C band facilities to be located at 41 degrees West Longitude and 61 degrees West Longitude. SGC proposes a bifurcation of the pending applications into those seeking slots east of 60 degrees West Longitude, the so-called FERN group (Far Eastern Regional Network), and the non-FERN group, those filing for slots west of 60 degrees West Longitude. As to the former, SGC indicates that these may be processed and granted apart from the non-FERN group since within the FERN group there is no mutual exclusivity and none within the non-FERN group. ISI maintains that because its requested locations of 56 degrees and 58 degrees West Longitude are especially well-suited to CONUS/Western European converge and have been on file since August 1983 and were also recently advance published by the IFRB, there are compelling equities in favor of assigning to ISI the slots requested. ISI reiterates that its application should not be included in any

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[9] In re Processing of New Domestic Satellite Applications, FCC Report No. DS-265 (released March 12, 1984).

domestic processing group, even though its proposal includes some secondary use of the satellites for domestic purposes. As to GSAT's suggestion that the Commission extend the domestic arc to as far east as 56 degrees West Longitude, ISI notes that the Commission has never described the domestic arc as extending beyond 60 degrees West Longitude, and that its request for regional service at 56 degrees and 58 degrees West Longitude should be granted.

III. Discussion

22. ISI's application is one of six applications that have been filed to construct and operate international communication satellite systems separate from INTELSAT. At the request of the Departments of State and Commerce, the Commission has refrained from taking final action on any of the applications until such time as the Executive branch could analyze the applications' impact on the national interest and foreign policy of the United States.[10] On November 28, 1984, President Reagan signed a Presidential determination that alternative satellite systems are "required in the national interest" within the meaning of Sections 102(d) and 201(a) of the Communications Satellite Act of 1962, subject to certain limitations.[11] The Departments of State and Commerce concurrently, at the direction of the President, jointly informed the Commission by letter of the Presidential determination and the criteria necessary to ensure that the United States meets its international obligations.[12] The limitations set forth by the Executive branch require, first, that each system be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public switched message networks (except for emergency restoration services), and, second, that one or more foreign authorities authorize the use of the proposed system and enter into consultation procedures with the United States under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm.

23. The Presidential determination satisfies the requirement for a threshold finding under the Communications Satellite Act that the proposed separate systems are "required in the national interest." The

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[10] Letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, and Diana Lady Dougan, Coordinator, International Communications and Information Policy, to Chairman Fowler (April 6, 1983); letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, to Chairman Fowler (August 26, 1983).

[11] Presidential Determination 85-2, filed in CC Docket No. 84-1299, dated November 28, 1984.

[12] Letter from George P. Shultz, Secretary of State and Malcom Baldridge, Secretary of Commerce, to Chairman Fowler, in CC Docket No. 84-1299 (November 28, 1984).

Presidential determination, however, is a general policy decision and is not intended to decide which, if any, applications now before the Commission should be granted. Therefore, the Commission's task is to establish a policy for regulatory consideration of the applications and to determine whether any of the proposed systems should be licensed under the public interest standard of the Communications Act of 1934 consistent with the Presidential determination.

24. We initiated an inquiry and rulemaking in CC Docket No. 84-1299 to solicit data and analyses regarding issues that have arisen in connection with the applications.[13] In that proceeding, we considered the potential public benefits of authorizing the proposed systems, the economic impact of the systems on INTELSAT, and their effect on consumer service providers and equipment manufacturers. In addition, we considered legal, technical and other policy issues that must be taken into account in considering the applications. Further, from a regulatory perspective, we considered unresolved questions concerning the scope and applicability of the Executive branch's service limitations.

25. In our *Separate Systems* decision in Docket No. 84-1299, we have today concluded that the establishment of separate satellite systems will result in substantial benefits to users of international satellite communications services. Separate systems will provide currently unavailable service enhancements to users with special communications needs, stimulate technological innovation and service development, improve network efficiencies, reduce user-costs, and contribute to the creation of new business and trade opportunities. We have further concluded that authorization of separate satellites subject to the Executive branch limitations provides reasonable assurance that INTELSAT will avoid significant economic harm from the entry of new suppliers. In reaching these conclusions, we have addressed and resolved issues which were raised in response to ISI's and the other applications. Thus, we find it unnecessary to addresss these same issues in this order. Here, we will determine whether ISI's application is consistent with the Executive branch service limitations, whether ISI has the requisite legal, financial and technical qualifications under Title III of the Communications Act, and whether grant of the application otherwise satisfies the public interest standard of the Communications Act. We believe that our decision here, along with our decision in Docket No. 84-1299, adopted today, is fully dispositive of all issues and argument raised with respect to ISI's application.

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[13] Establishment of Satellite Systems Providing International Communications, Notice of Inquiry and Proposed Rulemaking, 50 Fed Reg. 1570 (released January 4, 1985) (hereinafter referred to as the "*Separate Systems*" Notice).

Consistency With Executive Branch Service Restrictions

26. As we have discussed in our *Separate Systems* decision, the purpose of the Executive branch restrictions is to avoid significant economic harm to INTELSAT. Through these service limitations, INTELSAT's "core" revenues obtained from supplying space segment capacity for international switched message services would be protected from diversion by new suppliers. According to the Executive branch restrictions, separate systems are to be ". . . restricted to providing services through the sale or long-term lease of transponder or space segment capacity for communications not interconnected with the public switched-message networks." However, we found it necessary in our *Separate Systems* decision to clarify and further develop the Executive branch service restrictions to assure that they are understood by all parties and can be implemented from a regulatory standpoint.

27. We have determined that no communications provided over separate satellite system space segment capacity may interconnect with the public switched facilities of common carriers to provide switched message services such as MTS, telex, TWX, telegraph, teletext facsimile and high speed switched data services. In addition, we decided to apply the "no interconnection" and "sale and long-term lease" restrictions not only to separate system operators, but also to all levels of users of the facilities. And, in view of the "sale and long-term lease" requirement, separate system licensees may not operate as common carriers. Finally, we have determined the following: (1) there is no need to establish a minimum unit of space segment capacity which a separate system must provide; (2) the minimum lease period for the "long-term lease" of capacity is to be one year; (3) space segment capacity may be obtained and resold by common carriers and enhanced service providers to provide communications services not interconnected with any public switched message network; and (4) there is no basis to establish a "sunset" date for the Executive branch service restrictions absent a finding from the Executive branch that they are no longer necessary to fulfill U.S. international obligations.

28. ISI's application is consistent with the Executive branch restrictions except in two respects. First, ISI proposes to provide its regional satellite capacity on both a tariffed common carrier basis and non-tariffed basis. Based upon the aforementioned restrictions, we find that ISI is barred from the provision of its proposed common carrier services and that its Section 214 application for authority to provide such services must be denied. ISI must provide all of its space segment capacity through sale or long-term lease as defined in our *Separate Systems* decision. Second, ISI anticipates the eventual use of its space segment capacity for the provision of MTS. It states in its application that it is willing to accept a

three year moratorium on the provision of MTS. Although it recognizes in its comments in Docket No. 84-1299 that MTS is barred by the Executive branch it requests a "sunset" date on the restriction. ISI may not provide MTS nor may its system be interconnected to the public switched network to transmit MTS. Common carriers and enhanced service providers may obtain ISI's space segment capacity to provide services not interconnected with any public switched network. Finally, all the restrictions concerning interconnection and "sale and long-term lease" practices apply not only to ISI but to all levels of users of its facilities.

Legal Qualifications

29. With respect to legal qualifications, ISI has submitted the Common Carrier and Satellite Radio Licensee Qualification Report (FCC Form 430) and appropriate amendments to this Report. ISI was incorporated in Delaware in May 1983. Eighty percent of its common stock is held by TRT Communications, Inc. (TRTC) (43 percent), a diversified corporate enterprise which is a wholly-owned subsidiary of the United Brands Company (UB);[14] David H. Lubetzsky (8 percent), President and Chief Executive Officer of TRTC and its wholly-owned subsidiary, TRT Telecommunications, Inc. (TRTT);[15] Satellite Syndicated Systems, Inc. (15 percent), which specializes in communications; and LDX Group, Inc. (14 percent), a holding company whose subsidiaries specialize in telecommunications.[16] The remaining shares are owned by four individuals. ISI does not currently have any applications pending before the Commission. On the basis of the FCC Form 430 and attendant documents submitted to the Commission by ISI, we find that ISI possesses the requisite legal qualifications to be licensed to own and operate an international satellite system.

Financial Qualifications

30. In assessing an applicant's ability to construct, launch and operate an international satellite system, we must consider the applicant's

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[14] On June 5, 1985, UNC Resources, Inc. (UNC), a technology and services company engaging in precision manufacturing and the provision of technical and management services announced publicly that UNC has signed an agreement with UB to acquire TRTC, contingent on regulatory approval. This contingent transaction also calls for the TRTT management group to acquire an approximately 15 percent share of TRTC's initial equity whereas UNC would acquire the remaining approximately 85%.

[15] Subsequent to the filing of ISI's Application to provide separate satellite services, File No. CSS-83-004-P(LA), I-S-P-83-073, Mr. Lubetzsky was named A Director of UB, see ISI's second "Amendment to Legal Qualification," at 5 (received December 20, 1984).

[16] LDX Group, Inc.'s share was originally owned by Kansas City Southern Industries, Inc., the former being a 74 percent owned subsidiary of the latter. *See* ISI's first "Amendment to Legal Qualifications" (hereinafter cited as "First ISI Amendment") at 2 (received May 2, 1984).

financial competence or qualifications. We determined in our *Separate Systems* order that an applicant must demonstrate its financial preparedness to assume the costs and liabilities involved in constructing, launching and operating the proposed system for one year. The applicant must show its current financial ability to meet the costs and expenses of planning, constructing, launching and operating its proposed system.[17] However, in view of the fact that an applicant must undergo the INTELSAT consultation process, and due to the resulting uncertain status of the application pending this process, the applicant is unlikely to receive firm financial commitments. Therefore, we determined in our *Separate Systems* decision to consider the financial qualifications of applicants in two stages.

31. In the first stage, the applicant must demonstrate: (1) the estimated costs of proposed construction and launch, and any other initial expenses for the proposed space stations(s); (2) the estimated operating expenses for one year after launch of the proposed space station(s); and (3) the source(s) or potential source(s) of funding of the proposed system for one year, which would include the identity of financers and their letters of financial interest. For applicants which meet these minimal criteria, we will issue a construction permit setting forth the approved technical parameters of the proposed system for purposes of INTELSAT technical coordination under Article XIV(d). No later than 60 days after the Commission has been informed by the Department of State that the United States has fulfilled its Article XIV(d) obligations and the Commission may begin final authorization of ISI's proposed system, ISI must additionally meet the following second stage criterion to be given permission to begin construction: ISI's current financial ability to meet the costs of construction and launch, and operating expenses for one year after launch.[18]

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[17] The financial qualifications required for obtaining a license are in addition to the various requisites of the application process, specifically the limitations prescribed by the Presidential Determination, the INTELSAT Article XIV(d) consultation process, and a finding by the Department of State that the United States has fulfilled its obligations under the INTELSAT charter and that the applicant has satisfied the Title III public interest requirements pursuant to the Communications Act of 1934.

[18] A demonstration of current financial ability to meet such costs and expenses would include the submission of a balance sheet, verified by affidavit, current for the latest fiscal year and documentation of any financial commitments reflected in the balance sheet together with an exhibit demonstrating that the applicant has current assets and operating income sufficient to meet its estimated construction launch and operation costs and expenses. For newly established entities unable to submit a current balance sheet, these applicants shall submit an exhibit indicating the estimated income or revenues anticipated from the proposed operation of the satellite system necessary to meet the estimated costs of construction, launch and operation along with any additional information requested by the Commission. Such additional information could include

32. In its application, ISI has adequately demonstrated the first stage minimal financial requirements. First, ISI estimates the total capital costs of its systems' space segment to be approximately $230 million, this figure is broken down as follows: three spacecraft, excluding orbital incentives at approximately $120 million; two launches, including insurance at $100 million; and preoperational, engineering and general expenses at $10 million. Second, ISI includes with its application letters from three initial shareholders of the company, which together own 72 percent of ISI's initial shares of common stock, indicating that they have contributed their proportionate share of ISI's initial expenses and will continue to fund their proportionate amount of ISI's expenses.[19] ISI also includes a letter from Prudential-Bache Securities indicating interest in assisting ISI in fulfilling its financial objectives.

33. In view of this showing, we are issuing ISI a construction permit conditioned on ISI's subsequent timely submission of the requisite second stage financial information. ISI will be permitted to commence construction only should it timely satisfy the second stage financial requirement. As provided by the procedures established in our *Separate System* decision, ISI must meet this requirement no later than 60 days following the receipt by the Commission of the State Department's letter stating that the United States has fulfilled its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system. At that time, we will issue an order permitting ISI to begin construction. However, it may begin construction prior to receipt of the State Department's letter if the applicant can satisfy the second stage requirements prior to that time. Should the conditions of the second stage not be timely satisfied, or untimely satisfied without good cause shown, the conditional construction permit will become null and void and the orbital locations tentatively assigned to ISI will become available for reassignment. Once either the conditional construction permit or Commission order permitting construction by the applicant is issued, ISI bears all risks and liabilities in commencing construction of its satellite system pending final Commission issuance of launch authority and a license to begin operation.

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scheduled debt financing or stock issues, established lines of credit or other forms of internal financing. If the applicant is owned by more than one corporate parent, it must submit evidence of a commitment to the proposed satellite program by management of the corporate parent upon whom it is relying for financial resources.

[19] *See* Application of ISI, Appendix M, letters of United Brands Company, Satellite Syndicated Systems, Inc. and Kansas City Southern Industries, Inc. (KCSI). KCSI, which owned 14 percent of ISI's initial share of common stock, has subsequently sold its shares to LDX Group, Inc., a 74 percent subsidiary of KCSI.

Technical Qualifications

34. We have evaluated the space station facilities proposed by ISI with respect to the standards and policies we have adopted in our *Separate Systems* decision. The proposed facilities meet our standards for full frequency reuse, and it appears that they can be operated in a manner consistent with Commission rules and the International Radio Regulations once placed in orbit. ISI has predicated its interference budget on its facilities being compatible with the Commission's 2 degree spacing policies, and we expect that there should be no significant problems as we implement those policies for the proposed satellites and other U.S. satellites which may be adjacent to them. Therefore, we find that the proposed facilities meet our technical requirements.

Other Issues

35. With regard to AT&T's request that the Commission clearly state that it shall disregard any requests of ISI to compel common carriers to use spare capacity in its system should its application be granted, we find such a request unwarranted by the present circumstances. We agree that ISI should not be guaranteed any market share or services. We conditionally authorize ISI's proposed system without any guarantee of traffic from U.S. international common carriers or other sources. It shall be this Commission's policy that any such private systems succeed or fail on their own merits and not through Commission action that would guarantee common carrier use of the systems.[20] At the same time, we determined in our *Separate Systems* decision not to prohibit common carrier use of separate systems and will consider any proposed common carrier purchase of capacity in the context of our normal facility planning and authorization procedures. We took this approach in authorizing private international submarine cable systems.[21]

36. With regard to ISI's motion to strike Comsat's January 21, 1984 letter and the attendant INTELSAT Memorandum, we find that ISI has ably demonstrated that Comsat's actions in this regard were procedurally deficient in that Comsat's submission seeks to inject issues and material not previously addressed. In addition, the material was not concurrently served on ISI pursuant to Section 1.47 of the rules, was not signed by counsel pursuant to Section 1.52 of the rules, and invites the Chairman to contact Comsat with any questions concerning the memorandum in violation of the *ex parte* communication provisions in Section 1.1229 of the rules. We find, however, that the subsequent entry of the documents into the record by the Commission does remedy Comsat's breach of procedural

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[20] *See* Tel-Optik Limited, *et al.*, FCC 85-99 (released April 5, 1985).

[21] *Ibid.*

regularity. We therefore will deny ISI's motion to strike Comsat's letter and attendant INTELSAT document.

37. As to ASC's objection to ISI's proposed use of the 11.7 - 12.2 GHz band, we note that the Commission, in its WARC Implementation Order, adopted footnote NG 143, in addition to footnote 839. While footnote 839 limits use of the band to national and subregional systems, footnote NG 143 states:

> In the band 11.7-12.2 GHz protection from harmful interference shall be afforded to transmissions from space stations not in conformance with international footnote 839 only if the operations of such space stations impose no unacceptable constraints on operations or orbit locations of space stations in conformance with 839.[22]

The Commission stated that adoption of this footnote ". . . will result in a higher degree of flexibility in the use of this band, better spectrum utilization, and wider availability of services and equipment to users without adversely affecting the primary domestic use of this band."[23] We find that ISI's proposed system meets this expectation. In addition, we are, today, acting on the applications from our latest processing group for domestic fixed-satellite space stations, including the application of ASC. Therefore, ASC's request that ISI's application be processed with that group by virtue of domestic service that may be provided by ISI's system is moot.

38. With regard to Orion's and ISI's motions to strike comments filed by Philip Trezise and the firm Wiley & Rein, we find that such remarks cannot be barred based on a mere suspicion that entities other than those submitting the remarks were or are undisclosed parties in interest under Section 309(d)(1) of the Communications Act. While ISI and Orion have raised concern as to the nature and extent of INTELSAT's relationship with Trezise and Wiley, Johnson, we hesitate to rely upon the newspaper articles cited by ISI as sufficient demonstration of INTELSAT's undisclosed interest in this proceeding. As to Orion's and ISI's request that the Commission reject these same comments as informal objections, we find that while the comments at issue do not set forth specific allegations regarding any of the pending separate satellite system applications, they do generally address matters raised by these applications. We conclude, therefore, that the Commission's desire to compile a complete and comprehensive record regarding issues as novel as those presented here will best be served by accepting for filing the remarks of Trezise and Wiley & Rein. We do not believe that either ISI or Orion or any other separate satellite systems applicant will be prejudiced by our decision.

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[22] 47 C.F.R. 2.106 (1984).

[23] WARC Implementation Order at para. 13.

Public Benefits

39. On the basis of our analyses in our *Separate Systems* decision, we find that, with respect to the type of information transmitted, the services now offered or planned by INTELSAT are generally comparable to those proposed by ISI, such as video, audio and data transmission services. We also find several crucial differences between ISI's proposed services and the services offered or planned by INTELSAT. First, with regard to satellite downlink power, we find that INTELSAT, as a general matter, cannot equal ISI in achieving combinations of earth station size, transmission rates, connectivity user control, security and costs that may be described by a user with special needs. Second, with regard to coverage and connectivity of satellites providing customer-premises services, we find that ISI's proposed network, providing coverage of the contiguous United States in a single 14-11/12 GHz beam, cannot be matched by INTELSAT. Third, ISI proposes to both sell and lease its space segment capacity whereas INTELSAT, which is permitted to sell its transponder capacity, only leases it. ISI's proposal to sell or lease space segment capacity on a non-tariffed basis will provide users with the same benefits that domestic users have enjoyed as a result of the Commission's Domestic Transponder decision.[24] Private sale of space segment capacity will (1) permit the providers of capacity to make tailored and flexible arrangements with customers that are not possible under the regimen of a tariffed service offering, (2) enable customers to make long-term plans for the use of facilities with assurance as to facility availability and price, (3) permit systems to be specifically designed to customer needs, and (4) result in positive market development for new and innovative service offerings. We found in our *Separate Systems* decision, as we did in authorizing private submarine cable facilities,[25] that users with bulk capacity needs for special service requirements for international service should enjoy the same benefits.

40. Authorization of ISI's proposed separate system will provide those benefits to users of international satellite communications services that we have found in our Separate System decision will result from authorization of separate systems. ISI will provide currently unavailable service enhancements to users with special communications needs, stimulate technology and service development, and reduce user-costs. In addition, ISI's proposed system will offer customers with alternative suppliers to fulfill their special needs. We further find that applying competitive pressure to INTELSAT within the limited service area outlined above will result in the further development of this market and encourage service

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[24] Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1251 (1982), *aff'd sub nom.* Wold Communications, Inc. v. FCC, 735 F.2d 1465 (D.C. Cir. 1984).

[25] Tel-Optik Limited, *et al.*, FCC 85-99 (released April 5, 1985).

innovation. Based on the fact that ISI will operate within the confines of the Executive branch restrictions and in view of our findings in our *Separate Systems* decision, we find here that ISI's proposed system will not cause significant economic harm to INTELSAT.

41. To the extent that ISI's proposed system will be capable of providing coverage between points located within the United States, we will permit ISI facilities to be used for domestic U.S. communications only on a basis that is ancillary to use of the facilities for international communications. That is, ISI customers may use their space segment facilities to downlink to points located within the United States signals which originate in the United States and are destined for international points. However, the authorization granted here does not permit ISI to offer facilities dedicated for domestic U.S. communications. Should ISI desire to provide facilities dedicated for U.S. domestic use, it must comply fully with the application and authorization procedures established for domestic satellites. *See Separate System* decision, n. 140.

42. Finally, as to Comsat's petition to deny the ISI application, we find on the basis of the record compiled both in this file and on our findings in the *Separate Systems* decision, that Comsat presents no factual allegations to show that grant of ISI's application would be inconsistent with the public interest, convenience and necessity under Section 309(a) of the Communications Act of 1934. Therefore, pursuant to Section 309(d) of the Communications Act of 1934 and Section 63.52(c) of the rules, we deny the petition to deny filed by Comsat.

43. Accordingly, IT IS ORDERED pursuant to Sections 4(i) and (j), 151, 308, 309 and 319 of the Communications Act, as amended, Sections 151-319 (1976) that application File Nos. CSS-83-004-P(LA)-1, CSS-83-004-P(LA)-2, and CSS-83-004-P(LA)-3 ARE GRANTED and International Satellite, Inc. IS CONDITIONALLY AUTHORIZED to construct two in-orbit satellites and one ground spare satellite in accordance with the terms, conditions and technical specifications set forth in its application and the formal instruments of authorization to be issued at a later date.

44. IT IS FURTHER ORDERED that application File No. I-P-C-83-073 IS DENIED.

45. IT IS FURTHER ORDERED that final authorization for both launch and operation of these satellites shall not be issued unless and until: (1) one or more foreign authorities are to authorize use of each system and enter into consultation procedures with the United States Party under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm; and (2) the Department of State informs the Commission that the United States has completed its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system.

46. IT IS FURTHER ORDERED that as a condition of this order ISI must file with the Commission copies of any operating agreements entered into by ISI within 30 days of execution.

47. IT IS FURTHER ORDERED that the operation of ISI's proposed system is to be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public switched message networks (except for emergency restoration service).

48. IT IS FURTHER ORDERED that the Commission shall retain jurisdiction over the use of all space segment within the proposed system to ensure compliance with the service restriction stated in paragraph 47 above.

49. IT IS FURTHER ORDERED that ISI shall not begin construction of the satellites until it has provided the Commission with a demonstration of ISI's current financial ability to meet the costs of construction and launch as well as operating expenses for one year following launch. ISI shall file this information with the Commission no later than 60 days following receipt by the Commission of a letter from the Department of State informing the Commission that the United States has completed its Article XIV(d) obligations with respect to the proposed system and instructing the Commission that it may proceed with final authorization of the system. Should these conditions not be timely satisfied upon the expiration of the sixty-day period following receipt of the State Department's letter, unless extended by the Commission for good cause shown, this order permitting construction shall become null and void.

50. IT IS FURTHER ORDERED that ISI is temporarily assigned the orbital locations at 56° West Longitude and 58° West Longitude for operation of its proposed two in-orbit satellites.

51. IT IS FURTHER ORDERED that the temporary assignment of any orbital locations to ISI is subject to change by summary order of the Commission on 30 days notice and does not confer any permanent right to the use of the orbit or spectrum. Such a change may be ordered, *inter alia,* in the event of the national security or the public interest so requires, or to implement any of the objectives or policies set forth in today's Report and Order, FCC 85-399 in CC Docket No. 84-1299. Neither this authorization nor any right granted by this authorization, shall be transferred, assigned or disposed of in any manner, voluntarily or involuntarily, or by transfer of control of any corporation holding this authorization, to any person except upon application to the Commission and upon a finding by the Commission that the public interest, convenience and necessity will be served thereby.

52. IT IS FURTHER ORDERED that ISI shall comply with the Report and Order adopted today in CC Docket No. 84-1299.

53. IT IS FURTHER ORDERED that the petition to deny filed by Communications Satellite Corporation IS DENIED.

54. IT IS FURTHER ORDERED that the motions to strike Philip Trezise's comments filed by International Satellite, Inc. and Orion Satellite Corporation ARE DENIED.

55. IT IS FURTHER ORDERED that the request of AT&T Communications, Inc. that the Commission clearly state herein that, should ISI's applications be granted, the Commission will not entertain any future request of ISI to compel common carriers to use its spare space segment capacity IS DENIED.

56. IT IS FURTHER ORDERED that ISI's motion to strike from the record the January 31, 1984, letter and attendant INTELSAT Memorandum IS DENIED.

57. International Satellite, Inc. is afforded 45 days from the date of release of this order to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

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*See FCC 85-398, in this volume, for Appendix A.

Common Carrier Rates, Integration
Common Carrier, Rate Structure, Inquiry

Petitions for further reconsideration considered and partially granted, Flat-rate charges for non-premium access services eliminated and replaced with usage-based charges.
—MTS/WATS Market Structure
CC Docket No. 78-72, Phase I

FCC 85-149

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In the Matter of MTS and Wats Market Structure	CC Docket No. 78-72, Phase I

MEMORANDUM OPINION AND ORDER

Adopted: March 28, 1985; Released: April 23, 1985

BY THE COMMISSION: COMMISSIONER RIVERA DISSENTING IN PART AND ISSUING A STATEMENT; COMMISSIONER DAWSON DISSENTING.

I. Introduction

1. In the *Third Report and Order* in this docket (*Access Charge Order)*,[1] we adopted rules establishing a comprehensive system through which local telephone companies are to recover most of the costs of their facilities and services assigned to the interstate jurisdiction through the separations process.[2] The rules provide for the imposition of charges on

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[1] MTS/WATS Market Structure, Third Report and Order, 93 FCC 2d 241 (1983) (hereinafter *Access Charge Order), modified on reconsideration,* 97 FCC 2d 682 (1983) (hereinafter *First Reconsideration Order), modified on further reconsideration,* 97 FCC 2d 834 (1984) (hereinafter *Second Reconsideration Order), aff'd and remanded in part, Nat'l Ass'n of Regulatory Comm'rs v. FCC,* 737 F.2d 1095 (D.C. Cir. 1984), *cert. denied,* 53 U.S.L.W. 3583, 3595 (U.S. Feb. 19, 1985) (No. 84-95) (*NARUC v. FCC).*

[2] The separations rules, which govern the apportionment of local telephone company investment and expense between the interstate and the intrastate jurisdictions are set out in Part 67 of the Commission's Rules. *See* 47 C.F.R. §§ 67.1-67.701 (1984).

interexchange carriers and end users who lease or use local exchange facilities that may be used to complete interstate or foreign telecommunications. These charges are assessed through tariffs filed by the exchange carriers with this Commission, which replace the variety of compensation mechanisms through which interexchange carriers and other subscribers had been paying exchange carriers for interstate and foreign access services. In adopting this access charge plan, we sought to achieve a balance among the following four policy objectives: (1) preservation of universal service; (2) elimination of unreasonable discrimination and undue preferences among rates for interstate services; (3) efficient use of the local network; and (4) prevention of uneconomic bypass.[3] In addition, we sought to maximize the opportunities for full and fair competition among interexchange carriers during the transition to "equal access," when the existing inequalities between the interconnection options offered interexchange carriers will be eliminated.[4] We did this in part by providing that AT&T would pay a premium access charge during this transition because the access it receives to the local exchange is superior to that available to other interexchange carriers ("OCCs").

2. In two orders on reconsideration in this proceeding, we reaffirmed our commitment to the objectives set out in the *Access Charge Order*, while modifying in certain respects the means we had selected to achieve those objectives. In our *First Reconsideration Order*,[5] we modified the original access charge plan by ordering, (i) a more gradual transition to customer line charges for residential and Centrex-CO subscribers; (ii) replacement of the lump-sum premium charge on AT&T with a percentage differential in the per minute charges assessed for premium and non-premium access; (iii) establishment of a surcharge on private lines with the capacity to "leak" interstate traffic into the local exchange; and (iv) certain other changes in the distribution of access costs among users of access services. In our *Second Reconsideration Order*,[6] we further modified the access charge plan by deferring customer line charges for residential and single-line business customers to June 1, 1985, pending

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[3] *See Access Charge Order* at para. 122.

[4] The District Court decree providing for the reorganization of AT&T requires that the divested local Bell Operating Companies ("BOCs") provide all interexchange carriers with local exchange access "on an unbundled, tariffed basis that is equal in type, quality, and price to that provided to AT&T and its affiliates." *United States v. American Tel. and Tel. Co.*, 552 F.Supp. 131, 227 (D.D.C. 1982) *Modification of Final Judgment* or "*MFJ*"), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983). In another phase of this docket, we have recently established comparable "equal access" obligations for independent (*i.e.*, non-BOC) local telephone companies, subject to certain conditions. *See* MTS/WATS Market Structure (Phase III), Report and Order in CC Docket No. 78-72, Phase III, FCC 85-98 (released March 19,1985) (hereinafter *Phase III Order).*

[5] 97 FCC 2d 682 (1983).

[6] 97 FCC 2d 834 (1984).

further examination of various issues concerning the implementation of such charges, including their effects on universal service and small telephone companies. In that order we also (i) increased the differential between premium and non-premium access charges; (ii) provided that the latter would be assessed on a flat-rate, per line basis for interexchange carriers providing MTS-WATS equivalent services; (iii) revised the method of phasing out the differential during the transition to equal access; and (iv) clarified or modified the application of access charges to, *inter alia*, the closed end of WATS lines, the open end of foreign exchange (FX) lines, and "leaky" private lines. The conformance of the principal parts of the access change plan to the requirements of the Communications Act and other applicable legal standards was affirmed by the United States Court of Appeals for the D.C. Circuit in *NARUC v. FCC*.[7]

3. The first set of tariffs implementing the access charge plan were filed by the exchange carriers by October 3, 1983, to be effective January 1, 1984. We suspended these tariffs for three months in order to permit a thorough investigation of their terms and rates.[8] After such an investigation, which included a careful review of the extensive comments and replies submitted by interested parties and the issuance of a series of orders directing the exchange carriers to revise certain terms and rates,[9] we permitted the switched access provisions of the tariffs (as revised according to our directions) to go into effect on May 25, 1984, but we

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[7] 737 F.2d 1095. However, the Court remanded to the Commission for further consideration those parts of the plan dealing with the computation of customer line charges for party lines and the conditions under which exchange companies may elect to compute access costs based on an average schedule. We issued a Notice of Proposed Rulemaking in late 1984 requesting comments on, *inter alia*, these two sets of remanded issues. MTS/WATS Market Structure, Notice of Proposed Rulemaking, 49 Fed. Reg. 50,413 (1984), Current Service, Rad. Reg. 2d (P&F) 64:47 (1984). We recently issued an order addressing, *inter alia*, the party-line issues. MTS/WATS Market Structure, Memorandum Opinion and Order in CC Docket No. 78-72, Phase I, FCC 85-87 (released February 27, 1985). The average schedule issues will be addressed in a subsequent order. Furthermore, one important transitional part of the access charge plan — that involving the differential between premium and non-premium access charges — is the subject of a separate appeal. *AT&T v. FCC, appeal docketed*, No. 84-1087 (D.C. Cir. March 9, 1984).

[8] Investigation of Access/Divestiture Tariffs, Memorandum Opinion and Order, 48 Fed. Reg. 49,918, 54 Rad. Reg. 2d (P&F) 1119 (1983), *reconsideration denied*, FCC 83-568 (released December 29, 1983) (suspending the switched access tariffs until April 3, 1984); Memorandum Opinion and Order in CC Docket No. 83-1145, FCC 84-104 (released March 27, 1984) (further suspending some of the tariffs until June 13, 1984).

[9] Investigation of Access/Divestiture Tariffs, Memorandum Opinion and Order, 97 FCC 2d 1082 (1984) (hereinafter *ECA Tariff Order)*; Investigation of Access/Divestiture Tariffs, Memorandum Opinion and Order, 49 Fed. Reg. 13,075, 55 Rad. Reg. 2d (P&F) 869 (1984); Investigation of Access/Divestiture Tariffs, Memorandum Opinion and Order, 49 Fed. Reg. 19,821, 55 Rad. Reg. 2d (P&F) 1422 (1984) (hereinafter *April Tariff Order)*; Investigation of Access/Divestiture Tariffs, Memorandum Opinion and Order, 49 Fed. Reg. 23,924 (1984) (hereinafter *May Cost Order*).

continued our review of the provisions governing special access (basically local private lines used for access). We subsequently found those provisions to be unlawful.[10] The exchange carriers submitted revised special access tariffs, which (as further revised according to our orders) were recently allowed to go into effect.[11]

4. Shortly after the issuance of the *Second Reconsideration Order*, we issued a *Further Notice of Proposed Rulemaking*[12] requesting comments on four issues: (1) customer line charges for residential and single-line business subscribers; (2) the transitional mechanism for implementing such charges; (3) lifeline exemptions or other assistance for low-income subscribers; and (4) additional assistance for small telephone companies. At the same time, we asked the existing Federal-State Joint Board to prepare recommendations concerning those issues.[13] In an Order released November 23, 1984, the Joint Board recommended several modifications to our existing plan, including the implementation of customer line charges for residential and single-line business subscribers of $1.00 per month for the June 1, 1985 to May 31, 1986 period, and $2.00 per month beginning June 1, 1986.[14] We adopted the Joint Board's recommendations with a few minor changes and clarifications in an Order released December 28, 1984.[15]

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[10] Investigation of Access/Divestiture Tariffs, Memorandum Opinion and Order, 49 Fed. Reg. 50,457, 57 Rad. Reg.2d (P&F) 188 (1984) (hereinafter *Special Access Tariff Order*).

[11] Investigation of Access/Divestiture Tariffs, Memorandum Opinion and Order in CC Docket No. 83-1145, Phase I and Phase II, Part I, Mimeo No. 2647 (released February 19, 1985).

[12] MTS/WATS Market Structure and Amendment of Part 67, Further Notice of Proposed Rulemaking, 49 Fed. Reg. 18,318, Current Service, Rad. Reg. 2d (P&F) 64:41 (1984) (hereinafter *Further Notice*).

[13] *Id.* at para. 3.

[14] MTS/WATS Market Structure and Amendment of Part 67, Recommended Decision and Order, 49 Fed. Reg. 48,325, 57 Rad. Reg.2d (P&F) 267 (1984) (hereinafter *Joint Board Order).* The Joint Board also recommended that exchange carriers be entitled to file alternative interstate tariffs for the recovery of carrier common line costs where a state commission or the Joint Board has found that alternative tariffs are necessary to combat bypass. Any revenue shortfall created by an alternative tariff would be recovered by a 35-cent surcharge on the customer line charge. In addition, the Joint Board proposal included three other recommended actions: (1) a reduction of the customer line charge for customers who meet a state-established means test subject to verification; (2) initiation of a further proceeding by the Joint Board to examine the effect of customer line charges and the alternative anti-bypass tariffs on universal service, bypass, economic efficiency, and interexchange competition; and (3) implementation of changes in the methodology for calculating the amount of high-cost assistance to local telephone companies to direct more assistance to small telephone companies and those with higher cost levels.

[15] MTS/WATS Market Structure and Amendment of Part 67, Decision and Order, 50 Fed. Reg. 939, 57 Rad. Reg.2d (P&F) 511 (1984) (hereinafter *Decision and Order*). We modified the Joint Board's proposal for changes in the language of Part 69 of our rules

5. We also decided in the *Second Reconsideration Order* to examine further two other issues: (1) the effects of customer line charges (and federal decisions generally) on universal service, and (2) the extent and dangers of bypass. Staff studies addressing these two issues were initiated shortly after the issuance of the *Second Reconsideration Order*.[16] These studies were presented to the Commission on December 19, 1984, and published as Commission Reports. The first, confirming the findings of the *Michigan Report*,[17] concluded that there is no persuasive evidence that Commission decisions have had or will have a deleterious impact on universal service.[18] The Report also recommended that Commission resources be focused on monitoring possible impacts on universal service based on actual data, rather than attempting to predict such impacts based on hypothetical models. The second study confirmed earlier findings that bypass is presently occurring and will continue to grow, and found that service bypass (i.e., the use of private lines to access the facilities of an interexchange carrier) is likely to be the major form of bypass in the immediate future.[19]

6. In light of these related proceedings that address various issues concerning customer line charges, parties seeking reconsideration of the *Second Reconsideration Order* have for the most part properly focused their petitions on the other principal part of our access charge plan — that dealing with the assessment of access charges on interexchange carriers for their use of local exchange facilities in originating or terminating their customers' interstate communications.[20] These petitioners request that we reconsider certain modifications to our access charge rules for interexchange carriers and services that we made in the *Second Recon-*

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to reflect its recommendation that 90 days notice be required for the filing of alternative tariff provisions. *Id.* at para. 7 n. 11. We also directed the Joint Board to undertake a further study of issues relating to lifeline assistance measures and directed the Common Carrier Bureau to request additional comments concerning the effect of subscriber line charges on small business subscribers. *Id.* at para. 7.

[16] Public Notice, "Commission Seeks Further Information on the Effects of Federal Decisions on Local Rates and Services," Mimeo No. 3246 (released March 30, 1984); Public Notice, "Request for Data, Information, and Studies Pertaining to Bypass of the Public Switched Network," Mimeo No. 3206 (released March 28, 1984). *See also* Public Notice, "Request for Comments on Bypass Studies," Mimeo No. 6784 (released September 21, 1984).

[17] Local Telephone Service, A Report After Inquiry in CC Docket No. 83-788, 96 FCC 2d 491 (1984) (hereinafter *Michigan Report*).

[18] Further Report on the Effects of Federal Decisions on Universal Telephone Service, Order in CC Docket No. 78-72, Phase IV, FCC 84-636 (released January 4, 1985) (hereinafter *Michigan II Report*).

[19] Bypass of the Public Switched Network, Order in CC Docket No. 78-72, Phase I, FCC 84-635 (released January 18, 1985) (hereinafter *Bypass Report*).

[20] A list of parties submitting pleadings in this reconsideration round is attached as Appendix A.

sideration Order. The principal issues raised concern the non-premium rate structure we prescribed for access services provided OCCs for MTS-WATS equivalent services and the manner in which non-premium access charges are to be phased out as equal access is phased in. Petitioners have also objected to various aspects of our decision to treat the closed end of WATS lines under the switched access provisions of the rules and to the allocation of certain costs between the switched and special access categories. Our decision to order revised special access tariffs, filed December 3, 1984, prompted us to resolve one of the cost allocation issues separately because we did not anticipate acting on all the issues raised in this reconsideration round before the revised tariffs were filed. In the first part of the *Third Reconsideration Order* in this docket, we addressed the assignment of Category 5 station equipment costs to the special access element and adopted one amendment to the Part 69 rules.[21] In this Order, we reaffirm both the overall objectives and provisions of the access charge plan and the specific provisions we adopted in the *Second Reconsideration Order*, with one important modification — we amend the non-premium rate structure by eliminating flat-rate charges and requiring that all non-premium access services be billed on a usage-sensitive basis.

II. Discussion

A. Non-Premium Access Charges

7. In the various stages of this proceeding, we have considered at length how the access charges paid by interexchange carriers should reflect the differences between the premium access to the local exchange afforded AT&T for its MTS and WATS services and the inferior access afforded OCCs for their MTS-WATS equivalent services.[22] In the *Access Charge Order*, we held that a lump-sum premium access charge would be assessed on AT&T to reflect the opportunity cost of premium access.[23] We set this premium charge equal to the costs of interstate Customer Premises Equipment (CPE), which in 1984 were approximately $1.4 billion

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[21] MTS/WATS Market Structure, Memorandum Opinion and Order, 49 Fed. Reg. 46,383 (1984) (hereinafter *Third Reconsideration Order, Part I*). The Order amends section 69.303(c) of the rules, which provides the methodology for allocating Category 5 station equipment costs between special and switched access. Pursuant to the amended rule, only special access lines subject to the special access surcharge are counted in determining the allocation factor, which is based on the relative number of switched and special access equivalent lines.

[22] While other carriers provide interstate MTS and WATS with premium access (*e.g.*, larger independent telephone companies) and are subject to the premium charge, we will refer to that charge as an assessment on AT&T because AT&T receives most of the MTS and WATS revenues and pays most of the premium charges. *See First Reconsideration Order* at para. 92 n.75.

[23] *See Access Charge Order* at paras. 151-68.

and which will be declining at the rate of 25 percent during the period 1984-87, the approximate period during which equal access is to be phased in. In the *First Reconsideration Order,* we concluded that (i) our original estimate of the opportunity cost of premium access was too low, and (ii) a differential in the per minute charges for premium and non-premium access would provide a better mechanism for reflecting the value of premium access.[24] We decided that a discount of 35 percent applied to the carrier common line charges assessed OCCs for their non-premium access would provide a reasonable measure of the value of premium access in 1984, which we estimated would be approximately $2.2 billion. Again, we provided that the differential would be phased out as equal access was phased in, but revised the schedule for that phase-out to conform it explicitly to the equal access implementation schedule in the *MFJ.*

8. In the *Second Reconsideration Order,* we decided that our efforts to establish the value of premium access by reference to an opportunity cost analysis, while conceptually sound and focused on the relevant factors, produced results that were too imprecise and unstable to provide a reliable basis for establishing the differential between premium and non-premium access charges.[25] We did conclude, however, that material submitted during the second reconsideration round had made a convincing case that the premium value was somewhat larger than our $2.2 billion estimate in the *First Reconsideration Order,* although how much larger was difficult, if not impossible, to determine with much precision. Accordingly, we decided to adopt a suggestion made by the National Telecommunications and Information Agency (NTIA) that we establish a total differential for all relevant access elements, based not on a complex and problematic opportunity cost analysis, but on the total differential produced by the ENFIA rates then in effect.[26] ENFIA, despite its

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[24] *First Reconsideration Order* at paras. 91-127.

[25] *Second Reconsideration Order* at paras. 51-92.

[26] The Exchange Network Facilities for Interstate Access (ENFIA) tariffs, which were the result of an agreement between the pre-divestiture AT&T and some of the OCCs, governed the charges OCCs would pay for their use of local exchange facilities in completing their customers' interstate calls. The agreement constituted an interim measure to bridge the gap between court decisions permitting OCCs to offer services in direct competition with MTS and WATS, *MCI Telecommunications Corp. v. FCC,* 561 F.2d 365 (D.C.Cir. 1977), *cert. denied,* 434 U.S. 1040 (1978) *motion for an order directing compliance with mandate granted,* 580 F.2d 590 (D.C.Cir. 1978), *cert. denied,* 439 U.S. 980 (1978), and our determination in this proceeding of an appropriate access charge structure for all interexchange carriers. *See* Exchange Network Facilities (ENFIA), Memorandum Opinion and Order, 71 FCC 2d 440 (1979). Thus, the system of access charges we have provided in the Part 69 rules was intended to supplant the ENFIA rate structure. *Second Reconsideration Order* at paras. 51-55. Indeed, when the switched access tariffs became effective on May 25, 1984, the ENFIA system lapsed and

shortcomings,[27] was the rate structure the industry had been operating under for a number of years. In light of our concerns and those of many parties that there be a smooth transition from ENFIA to equal access that would not undermine the OCCs' ability to compete effectively, it made sense to use the ENFIA rates as an initial benchmark for beginning that transition. Again adopting a suggestion of NTIA, we determined the non-premium discount for 1984 by reducing the then-existing ENFIA discount for all relevant access elements (estimated to be about 70 percent) by approximately one quarter, to 55 percent.

9. In making this determination, we expressed the concern that, while the 55 percent discount would produce a smooth transition from ENFIA to equal access for most OCCs, the change from the per line ENFIA charges to the usage-based access charges would result in a substantial and abrupt increase in costs for those OCCs with above-average usage per line. Accordingly, we held that non-premium access charges should be computed on a per line basis, consistent with the practice under ENFIA.[28] We found that a 9,000 minutes per line factor should be used to compute the initial monthly per line charge because that figure was a reasonable estimate of average OCC usage.[29] In addition, to provide further assurance that the flat-rate methodology would facilitate the transition to equal access, we stated that we would initiate a proceeding in 1985 to review the non-premium rate structure and make any necessary revisions

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no longer governs the compensation paid by OCCs to exchange carriers for the use of exchange facilities.

[27] *See* MTS/WATS Market Structure, Second Supplemental Notice of Inquiry and Proposed Rulemaking, 77 FCC 2d 224, paras. 28-35 (hereinafter *Second Supplemental Notice*).

[28] *Second Reconsideration Order* at para. 85.

[29] The non-premium per line charge is obtained by multiplying a hypothetical premium charge per access minute for each relevant access element by 4,050 (45 percent of 9,000) minutes. *See Second Reconsideration Order* at para. 87. We provided for two different adjustments to this initial per line charge for the period beginning June 1, 1985. First, we provided that the initial charge would be increased to reflect changes in the Consumer Price Index ("CPI"). Second, we stated that a reduction in the charge might be considered for the 1985-1986 period in light of any adjustments we might make to customer line charges in the supplemental proceedings addressing such charges. As discussed in para. 4, *supra,* we have adopted Joint Board recommendations that residential and single-line business customer line charges be set at $1.00 for the year beginning June 1, 1985, and $2.00 thereafter. *See Decision and Order, supra* note 15. In order to implement our commitment in the *Decision and Order* that the full amount of the revenue generated from such charges be flowed through to consumers in the form of reduced interstate toll rates, we recently provided that the flat-rate charge for non-premium access should be recalculated for the year beginning June 1, 1985, rather than simply adjusted by the CPI. MTS/WATS Market Structure and Amendment of Part 67, Memorandum Opinion and Order in CC Docket No. 78-72, Phase I, and No. 80-286, FCC 85-71 (released February 26, 1985).

for future access years. Finally, we provided that the non-premium rates would be phased out as equal access is phased in on an end-office-by-end-office basis.[30]

10. The principal objections raised in this reconsideration round to the non-premium rate structure we adopted in the *Second Reconsideration Order* concern the use of flat-rate, as opposed to a usage-sensitive, charges for OCC non-premium access. In this Order, we find these objections meritorious and direct that non-premium access charges be assessed on a usage-sensitive basis as of January 1, 1986. While we have decided to institute a usage-based structure for non-premium access charges, it is still necessary to address certain objections related to three specific features of the flat-rate structure, since it will in effect through the end of May 1985: (i) the existence of an "FX loophole," which gives OCCs the option of obtaining usage-priced FX lines as an alternative to flat-rate FGA lines; (ii) the selection of 9,000 minutes per line as the basis for calculating the discounted flat rate; and (iii) the availability of LATA-wide access for terminating Feature Group A (FGA) traffic as part of non-premium access.[31]

1. The use of a flat rate for OCC non-premium access

11. AT&T, Pacific, and NYNEX object to the flat-rate structure for non-premium OCC access on the grounds that it is inefficient and discriminatory, and they urge us to return to usage-based charges for such access.[32] The flat rate encourages inefficient use of the local network, these parties argue, because OCCs, by increasing their minutes of use per line, impose additional costs on local exchange carriers without paying any additional charges. They argue that a per line charge based on an estimate of average OCC minutes of use discriminates in favor of those OCCs with higher than average usage per line, which tend to be the larger, more established OCCs, and against those with lower than average usage per line, which tend to be the smaller, newer OCCs. This advantage for larger OCCs, they contend, undercuts the Commission's goal of promoting equal competition in the interexchange marketplace. In addi-

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[30] *Second Reconsideration Order* at para. 89-90.

[31] Objections to the provisions governing the phase-out of the non-premium rate structure are discussed *infra* section II.B.1.

[32] AT&T Petition at 10-14; Pacific Petition at 6-8; NYNEX Opposition at 9 n.*; AT&T Opposition at 6; NYNEX Reply at 4-5; Pacific Reply at 10-13. *See also* Rochester Opposition at 6-10. Furthermore, Ameritech urges us to return to a lump-sum premium charge on AT&T, as originally provided in the *Access Charge Order*. Ameritech Petition at 7-14. Our decision to abandon the lump-sum premium charge and recover the value of premium access from AT&T on a usage basis was made in the *First Reconsideration Order* and was not changed in the *Second Reconsideration Order*. Hence, Ameritech's request is untimely in this reconsideration round and is denied as such. *See* section 1.429(i) of the Commission's Rules, 47 C.F.R. § 1.429(i)(1984).

tion, Pacific maintains that, by effectively increasing the discount above 55 percent for AT&T's largest competitors, the flat-rate structure provides a further incentive for AT&T to bypass local exchange networks.

12. The OCCs that filed pleadings in this reconsideration round all support the flat-rate structure for non-premium access.[33] They generally assert that the per line charge for OCC access both adequately compensates exchange carriers and fairly reflects the relative value of the different quality access provided AT&T and the OCCs.[34] Many OCCs also argue that charging for access on a per line basis promotes a smooth transition from the ENFIA arrangements to the usage-based rate structure of equal access.

13. When we implemented the flat-rate structure for non-premium access in the *Second Reconsideration Order*, we viewed it as the best method for avoiding a very abrupt increase in access costs for those OCCs with per line usage levels that substantially exceeded the industry average.[35] While we recognized that the use of a per line charge might disadvantage new entrants, we believed that the experience with the ENFIA tariffs, which used per line charges for all elements, indicated that this rate structure would not create a significant entry barrier. We stated that "[a] number of carriers have entered the market while the ENFIA tariff has been in effect and most have apparently succeeded in achieving average usage levels fairly quickly."[36] However, it is now our view that, for a number of reasons, this reliance on our past experience under ENFIA may have been misplaced. First, for most of the period those tariffs were in effect, there were only a relatively few OCCs; more recently, many smaller carriers have entered the market and are attempting to compete, not only with AT&T, but also with the larger OCCs. Second, as a number of parties point out, the average usage levels for the OCC industry on which the ENFIA flat-rate was based, which ranged from 3,000 to approximately 5,400 minutes per line, were substantially less than the 9,000 minutes we found to be a reasonable estimate of the current industry average on which we based the flat rate for non-premium access.[37]

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[33] Allnet Petition at 4; GTE Sprint Opposition at 3-6; Lexitel Opposition at 7-9; SBS Opposition at 3-7; USTS Opposition at 7-11; Teltec Opposition at 3; MCI Opposition at 10; GTE Sprint Reply at 6-8.

[34] *See, e.g.*, SBS Opposition at 7.

[35] *Second Reconsideration Order* at paras. 85-86.

[36] *Id.* at para 86.

[37] The flat-rate charge for non-premium access in the NECA tariff is slightly more than $330. NECA Tariff FCC No. 1. The flat-rate charges under ENFIA ranged from slightly under $100 to slightly over $225. *See, e.g.*, AT&T (ENFIA), Memorandum Opinion and Order, 91 FCC 2d 1079, 1088 (1982); Memorandum Opinion and Order in CC Docket No. 78-371, Mimeo No. 4671 (released June 10, 1983). *See also* AT&T Opposition at 7 n.***.

14. With many more competing firms and a higher industry average usage level, the disadvantage to new entrants created by the per line charge, which we characterized as "minimal" in the *Second Reconsideration Order*, is arguably much greater than was the case under ENFIA. Accordingly, we are no longer sanguine about the ability of new entrants to move rapidly and easily to usage levels close to the industry average[38], and thus, about our previous finding that flat-rate non-premium charges would not harm small OCCs or serve as a barrier to entry. Furthermore, in opting for the per line charge, we were concerned that exchange carriers would incur substantial administrative costs in switching to usage-sensitive billing for non-premium access services. It now appears that the measurement capability sufficient to implement a usage-based non-premium rate structure does exist in the vast majority of end offices, thereby lessening the administrative burdens of assessing such charges on a usage-sensitive basis.[39]

15. Therefore, in order to avoid any unreasonable discrimination against smaller, newer OCCs[40] and thereby promote equal competition in

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Allnet questions our reliance on the ENFIA experience as the basis for finding that the flat rate we adopted in the *Second Reconsideration Order* will not be an entry barrier:

> The Commission . . . states, however, that past experience with ENFIA 'indicates that per line charges do not create a significant entry barrier.' The experience with ENFIA is inappropriate in this instance. The ENFIA rate was based upon minutes which ranged from approximately 3,000 minutes to slightly more than 5,000 minutes. These figures, as a barrier to entry, are a far lower barrier than 9,000 minutes.

Allnet Petition at 4-5 (citation omitted).

[38] In a recently filed Petition for Clarification, Lexitel noted that current average usage on its FGA access lines is approximately 7,500 minutes. Petition for Clarification in CC Docket Nos. 78-72, Phase I, and 83-1145, Phase I, at 2 (filed February 21, 1985) (hereinafter Lexitel Petition for Clarification). Allnet, in a Supplement to its Petition for Reconsideration in this proceeding, stated that its own average monthly usage level is 6,905 minutes per line. *See infra* note 51. Both Lexitel and Allnet entered the market in 1981. These are two of the "larger" of the relatively new carriers. If their usage levels fall considerably short of the industry average, the monthly usage levels for some of the very new and small OCCs are probably significantly below the 9,000 minutes per line figure.

[39] *See* the BOC Waiver Petition, discussed *infra* para. 30, and other documents in that record, which indicate that in most cases exchange companies can measure the total amount of non-premium traffic delivered to an OCC POP (although they cannot generally determine from which end office that traffic originated). *See also* AT&T Reply at 3 n.*. Furthermore, exchange carriers are now providing non-premium FGA service on a usage-sensitive basis in the form of FX lines.

[40] Lexitel states that, under the flat rate in the NECA tariff, it pays $0.045 per minute for an average 7500 minutes per line per month, while GTE Sprint, with over 12,000 average monthly usage minutes per line, pays $0.028 per minute, a difference of 61%. Lexitel Petition for Clarification, *supra* note 38, at 11. Thus, the flat-rate structure produces the

the interexchange marketplace, we have decided to establish a usage-based rate structure for all non-premium access services. The amendments to the rules implementing this decision are set out in Appendix B. This new rate structure for non-premium access will go into effect as of January 1, 1986.

2. Specific objections to the flat rate structure

16. As indicated above, despite our adoption today of usage-based charges for all non-premium access services, it is necessary to address certain objections to the flat-rate structure since it will remain in effect until January 1, 1986.

(a) The "FX Loophole"

17. One question about the present non-premium rate structure that should be clarified at this time is whether the Part 69 rules and the current access tariffs permit OCCs to avoid paying the flat rate for FGA lines by ordering usage-based FX lines and reselling them to form an MTS-WATS equivalent service. A large number of parties address this issue, and all but one agree that OCCs have this option,[41] although they differ as to whether this is a desirable result. AT&T and a number of exchange carriers characterize this option as an "FX loophole", which they assert undercuts the Commission's stated rationale in establishing a flat-rate structure for non-premium access and demonstrates the need to return to usage-based charges. A number of OCCs argue that the availability of this option is a positive feature of the present non-premium rate structure that primarily benefits the small OCCs.

18. While we did not focus on this question in the *Second Reconsideration Order*, and hence the present rules and our explanation of their provisions in that Order are somewhat ambiguous on this point,[42] we

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anomalous result that the new, smaller OCCs may be paying substantially more for non-premium access than their larger, more established competitors. Indeed, an OCC with a usage level below 4050 minutes per line is paying more for inferior access than AT&T is paying for premium access. This result could have a particularly deleterious impact on the ability of small regional OCCs, which serve limited geographic areas, to expand their operations by entering new markets and competing with AT&T and the established OCCs now serving those markets. We view this result as discriminatory and a significant burden on competition in the interexchange marketplace.

[41] *See* AT&T Petition at 12; AT&T Reply at 2-4; Rochester Opposition at 6-7; NYNEX Opposition at 9 n.*; NYNEX Replay at 4-5; Pacific Reply at 12; SBS Opposition at 6-7; Teltec Opposition at 3 n.4; MCI Opposition at 10 n.14. GTE Sprint is the only party that takes the position that OCCs may not use FX lines in this fashion. *See* GTE Sprint Opposition at 3-6; GTE Sprint Reply at 6-8.

[42] *But see* Separate Statement of Commissioner Dawson, *Second Reconsideration Order*, 97 FCC 2d at 895 ("Absent such restrictions [on resale of FGA services], there would no basis to prohibit an OCC from ordering FX service on a non-premium per-minute basis and reselling it to form an MTS/WATS equivalent service.")

agree with the commenting parties who assert that OCCs should have the option of ordering and reselling usage-based FGA. The alternative, which would involve restricting resale by OCCs of access services or limiting the access services available to OCCs, would be contrary to our policies against prohibitions on resale and discrimination in services and rates based on the nature of the customer.[43] Furthermore, in light of the concerns discussed above about the effect of the flat rate on smaller OCCs, we find that such restrictions could harm competition in the interexchange market.[44] Accordingly, the present non-premium rate structure, including the availability of usage-based FX lines as an alternative to flat-rate FGA connections, will continue in effect until the flat-rate structure is eliminated.[45]

(b) The use of 9,000 minutes per line as the assumed OCC monthly usage

19. A number of parties have objected to our selection of a 9,000 minutes per line usage rate as the basis for computing the flat-rate charge. Allnet argues that 9,000 minutes per line is too high and does not reflect an industry-wide average usage level.[46] It asserts that, in adopting

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[43] *See, e.g., ECA Tariff Order, supra* note 9, at para. 69 and page 2-85.

[44] Lexitel, in a recently filed petition, asks us to issue a ruling clarifying that all consumers of access services may obtain non-premium FGA lines at usage-sensitive as well as flat rates. *See supra* note 38. Lexitel states that it had been the widespread practice among exchange carriers to permit OCCs to order either type of FGA, but that recently some exchange carriers have been refusing to fill new OCC orders for usage-based FGA. A similar petition for declaratory ruling was filed by TDX Systems, Inc. The action we take today has the effect of providing Lexitel and TDX with the relief they seek until flat-rate FGA is eliminated entirely. Accordingly, we will dismiss the Lexitel and TDX petitions as moot.

[45] While we recognize that, as AT&T argues, providing this option to OCCs will result in an aggregate discount to OCCs as a group that is somewhat greater than 55%, we believe that this possible deviation from the discount established in the *Second Reconsideration Order* is outweighed by our concerns with discrimination against smaller OCCs inherent in a strict application of the flat rate, particularly since the deviation will only remain in effect for a short period of time. Furthermore, by requiring a usage-based rate structure for all non-premium access services, effective Jan. 1, 1986, we are adopting the "solution" urged on us by AT&T and the exchange carriers, the parties that view the availability of this option as a flaw in the transitional plan for non-premium access established in the *Second Reconsideration Order*.

[46] Allnet Petition at 3-5. Allnet also asserts that, in states in which intrastate access charges are assessed on a usage basis, the Commission's formula will result in OCCs paying both intrastate and interstate access charges for the same usage. Allnet explains that, when an OCC uses a line for both inter- and intrastate traffic and the interstate use is less than 9,000 minutes, it will pay twice for its intrastate minutes to the extent of the difference between interstate minutes and 9,000 minutes. For example, a carrier that uses a line for 5,000 minutes of interstate use and 5,000 minutes of intrastate use will, according to Allnet, pay for 9,000 interstate minutes under the Commission's formula

the 9,000-minute figure, we relied on flawed data that overstate OCC interstate minutes.[47] AT&T and NYNEX also challenge the accuracy of the 9,000-minute figure, but argue that it is too low. These parties maintain that the data on which the Commission relied are now two years old and probably understate actual OCC usage levels.[48] In particular, AT&T states that GTE Sprint has admitted to at least 12,000 minutes of use per line as of 1983, and argues that the steady increase in OCC usage levels, from an accepted average of 3000 minutes per line in 1980 and 1981 to GTE Sprint's 12,000 minutes per line in 1983, demonstrates that the 9000 minute figure is likely to understate significantly actual OCC usage during the current period.[49] In response to these arguments by AT&T, SBS states that, with many OCCs rapidly entering new markets, per line usage levels are more likely to be below, than above, 9000 minutes.[50]

20. We reaffirm our choice of 9,000 minutes per line as a reasonable estimate of average OCC monthly usage. None of the parties have demonstrated that the actual average usage rate is different from the figure we selected or have suggested an alternative figure that we might use. Merely identifying a particular OCC whose usage is above or below 9,000 minutes of use per line does not impeach the reliability of the figure selected.[51] Indeed, if anything, the reliability of our selection is further supported by the fact that the parties can point to OCCs whose usage

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and 5,000 intrastate minutes under a state tariff — for a total of 14,000 paid minutes, which is 4,000 minutes more than it actually used. *Id.* at 9-12. While Allnet characterizes this as a double billing problem, its complaint seems simply to be a restatement of its position that 9,000 interstate minutes per line is too high.

[47] Allnet Petition at 3 nn.8-9; Allnet Reply at 4-5. Lexitel, while not explicitly endorsing Allnet's arguments, urges us to "carefully consider" them. Lexitel Opposition at 9 n.12.

[48] AT&T Opposition at 6-7; *see also* NYNEX Opposition at 13-14.

[49] AT&T Opposition at 7 n. ***.

[50] SBS Opposition at 6.

[51] Allnet, in a Supplement to its Petition for Reconsideration, stated that its own average monthly usage level is 6,905 minutes per line. AT&T and Nynex have argued that we should refuse to consider this information because the Allnet pleading was untimely filed. AT&T Opposition at 7 n.**; NYNEX Opposition at 14. Allnet's Supplement was filed late and was unaccompanied by an appropriate motion for acceptance. *See* section 1.429(d) of the Commission's Rules, 47 C.F.R. § 1.429(d)(1984). However, in its Supplement, Allnet stated that, at the time it filed its petition for reconsideration, it was "in the process of conducting a study to determine usage for all of its access lines," and that it filed its Supplement shortly after this study was completed. Allnet Supplement at 1-2. We shall treat this explanation as in effect a motion for acceptance and for this purpose waive the requirement of section 1.429(d) of our rules that such a motion be stated in a separate pleading. We therefore accept Allnet's Supplement, and we have considered the data presented therein. For the reasons stated in the text, however, those data do not refute the accuracy of the average figure we have selected.

levels fall on each side of the estimated average.[52] Therefore, while 9,000 minutes per line is only an estimate of OCC average usage, we are not persuaded that this estimate is unreasonable or that another figure would be more reasonable. Accordingly, in the absence of any relevant evidence in this record undermining our selection, we believe changes to the estimated average used in the flat-rate calculation are not necessary.

(c) LATA-wide access

21. AT&T and a large number of exchange carriers complain about the fact that subscribers to non-premium FGA receive LATA-wide terminating access without paying any distance-sensitive charges.[53] These parties identify two sets of problems with such an arrangement, one concerning OCCs and the other concerning end users. First, with respect to the OCCs, AT&T asserts that providing LATA-wide access for payment of the flat-rate charge bestows an unfair competitive advantage on these carriers, allowing them to limit their Points of Presence (POPs) in a LATA without incurring transport charges comparable to those AT&T would incur if it used similar arrangements. Furthermore, AT&T argues that the assumed average hauls reflected in the access tariffs are unrealistically low, with the result that the non-premium discount will be effectively increased above the 55 percent level set by the Commission. The exchange carriers argue that LATA-wide access for OCCs represents a divergence from the Commission's general principle of requiring parties to bear the costs they cause and encourages OCCs to configure their networks in an inefficient manner, leading to revenue shortfalls for exchange carriers. Furthermore, AT&T and the exchange carriers point out that LATA-wide access is inconsistent with the ENFIA model, under which OCCs were only provided with access to a non-toll calling area for payment of the flat-rate charges.[54]

22. Second, with respect to end users, exchange carriers complain that inclusion of LATA-wide access as part of FGA leads to substantial

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[52] Furthermore, we are unpersuaded by Allnet's complaints that both of the sources we used to derive the 9,000 minute figure are tainted by the inclusion of intrastate minutes of use. The 1983 recalculation of ENFIA minutes, which was the principal basis for our estimate, purports to exclude intrastate minutes. *See* Comments of the BOCs and CSO, CC Docket No. 83-1145 (Phase I), (filed December 22, 1983) at App. II, pp. 53, 56. However, our secondary reliance on the figures reported in MCI's Petition for Reconsideration in the last reconsideration round was misplaced. These figures appear to relate solely to Texas intrastate minutes.

[53] AT&T Petition at 11 n.**; AT&T Opposition at 18-20; AT&T Reply at 4; U.S. West Opposition at 1-5; Ameritech Petition at 2-7; Pacific Petition at 2-3; NYNEX Opposition at 9 n.*; Rochester Opposition at 7-8; Southwestern Bell Opposition at 2-4; Pacific Reply at 7-10.

[54] AT&T Petition at 10 n.**; Ameritech Petition at 2-4; Rochester Opposition at 7-8; Pacific Reply at 8-9.

intrastate toll avoidance by such customers.[55] They argue that, when FGA service with LATA-wide access is used as a terminating service, it becomes in effect a LATA-wide, OutWATS service. Thus, whenever the discounted FGA rates are lower than intrastate toll or WATS rates, end users with substantial levels of intraLATA toll calling have an economic incentive to substitute the former services for the latter.[56]

23. A number of OCCs respond that, although the transitional transport charges are not distance sensitive, they are based on average transport levels and were derived from the total revenue requirement for the transport element. Therefore, they argue, there should be no underrecovery of exchange carriers' revenue requirements.[57] For similar reasons, they contend that AT&T's arguments that LATA-wide access effectively increases the non-premium discount above 55 percent and bestows other competitive advantages on OCCs are incorrect. Rather, OCCs are simply paying an average charge for transport, as they do for other access elements, instead of specific transport charges for each OCC POP. Further, the OCCs argue that the problem of intraLATA toll avoidance by end users, to the extent it exists, can be alleviated by measures short of eliminating LATA-wide terminations for flat-rate FGA.[58] Thus, the OCCs assert that an averaged, flat-rate transport charge including LATA-wide access is a reasonable mechanism for recovering the cost of transport during the transition to equal access, when transport charges will be distance sensitive. Finally, GTE Sprint argues that the LATA-wide access issue is grounded in the access tariff provisions and, therefore, should be resolved in the tariff process.[59]

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[55] Ameritech Petition at 5-7; Pacific Petition at 7-8; NYNEX Opposition at 9 n.*; Rochester Opposition at 7-8; U.S. West Opposition at 4-5; Southwestern Bell Opposition at 1-4; U.S. West Reply at 3-4.

[56] Some exchange carriers assert that intraLATA toll avoidance by end users is a particularly serious problem because of the availability of flat-rate FGA connections. *See, e.g.,* Ameritech Petition at 4; Rochester Opposition at 8; U.S. West Opposition at 4-5.

[57] Lexitel Opposition at 5-7; GTE Sprint Opposition at 6-7; ALTEL Opposition at 6; Ad Hoc Reply at 9.

[58] For example, USTS argues that such intrastate use of FGA connections by end users would violate the access tariffs and rules. It states that there is no reason to assume that such abuse will be widespread, but if it does become a serious problem, the exchange carriers are competent to devise "structural remedies" to control it, and the Commission could be expected to be responsive to such efforts. It concludes that a major, and otherwise salutary, feature of the access charge transition for OCCs should not be abandoned on the basis of what is now at least a largely hypothetical problem. USTS Opposition at 12-14. MCI makes a similar argument, but adds that if the Commission wishes to guard against the possibility of intraLATA toll avoidance by end users, it could provide that end users ordering FGA be required to certify that all traffic over such lines will be interstate. MCI Opposition at 4-11. *See also* GTE Sprint Reply at 8.

[59] GTE Sprint Opposition at 6-7 and Reply at 9-10.

24. The LATA-wide access issue raised by AT&T and the exchange carriers results from the interaction of our rules governing transitional, non-premium access charges and access tariff provisions filed by the exchange carriers. As adopted in the *Second Reconsideration Order*, the rules provide that transport is among the relevant access elements factored into the per line charge for OCC non-premium access.[60] However, those rules do not specify any particular geographic scope for the transport element, *i.e.*, they do not specify the area to which a subscriber obtains access for payment of the access charge. Thus, LATA-wide access terminations do not derive from the Part 69 rules. Rather, exchange carriers are providing LATA-wide access as part of FGA pursuant to the provisions in their access tariffs governing the transport component of FGA switched access.[61] We agree with GTE Sprint, therefore, that the tariff process is the proper forum for the resolution of the issue of LATA-wide access for terminating non-premium FGA traffic. Exchange carriers seeking to limit terminating FGA access to an area smaller than a LATA would not be constrained by any provision of the Part 69 rules from filing tariff provisions that would accomplish this end.[62]

25. If the BOCs conclude that they must offer LATA-wide access in order to satisfy *MFJ* requirements, the elimination of flat rates for non-

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[60] *See Second Reconsideration Order* at para. 87; section 69.206 of the Commission's Rules, 47 C.F.R. § 69.206 (1984).

[61] When the initial access tariffs were filed by the exchange carriers in the fall of 1983, LATA-wide terminations were provided as part of the transport component of switched access, which included usage- and distance-sensitive charges. When the *Second Reconsideration Order* adopted the flat-rate approach for non-premium charges for all access elements, including transport, the LATA-wide feature of transport remained in the access tariffs. Hence, the flat-rate charge for FGA non-premium access includes a flat-rate component based on an average transport charge for FGA traffic. However, at the time of those initial tariff filings there was nothing in the Part 69 rules or any of the orders in this docket that compelled the exchange carriers to provide LATA-wide access; and none of the modifications we made to the non-premium rate structure in the *Second Reconsideration Order* changed that situation. Accordingly, no amendment to the Part 69 rules would be required to alter the LATA-wide access provisions of the access tariffs.

[62] On August 6, 1984, NECA submitted a request for special permission to file an amendment to its tariff eliminating LATA-wide terminations for FGA services on one day's notice and without the supporting material required by section 61.38 of our rules. The Chief, Tariff Division, by letter to NECA, waived section 61.58 to permit such amendments to be filed on 45 days' notice, denied the request to waive the requirements of section 61.38, and specified certain information that should be included in the section 61.38 submission. Letter from Chief, Tariff Division to G. R. Evans, Director, Tariff and Regulatory Affairs, (August 10, 1984). While NECA has not refiled its tariff amendment, Pacific Northwest Bell and Northwestern Bell filed changes to their tariffs to make FGA available only for use in conjunction with interstate communications. Those tariffs are now in effect. *See* Pacific Northwest Bell, Transmittal No. 126 (filed September 21, 1984) and Northwestern Bell, Transmittal No. 966 (filed September 28, 1984).

premium access should enable them to solve any problems that are caused by the interaction of a flat rate with LATA-wide access. The revised rules that we are adopting will enable all local exchange carriers to impose distance-sensitive charges for premium and non-premium transport. If the BOCs believe that any problems are sufficiently urgent to require revisions in non-premium transport before the new rules become effective, the BOCs may present such claims in petitions for a waiver of the present rules.

B. Equal Access Implementation Issues

1. Phase-out of the Non-Premium Access Charge Differential

26. As discussed above, in the *Second Reconsideration Order* we established premium and non-premium rate categories for access services provided by exchange carriers during the transition to equal access. Non-premium charges apply to FGA and Feature Group B (FGB) services and are calculated on the basis of a 55 percent discount (compared to premium access charges). We also provided in the *Second Reconsideration Order* that this discount is to be phased out as equal access becomes available on an end-office-by-end-office basis, *i.e.*, when an end office is converted to equal access, the non-premium discount will no longer apply to FGA and FGB traffic originating or terminating in that end office.[63]

27. In petitions seeking reconsideration of the *Second Reconsideration Order*, a number of parties object to certain features of our end-office-by-end-office approach to phasing out the non-premium discount. First, a number of OCCs assert that equal access should be deemed to be available for purposes of phasing out the discount only when "tandem access" becomes available, *i.e.*, when it is possible to access multiple Feature Group D (FGD) end offices through a single tandem switching arrangement.[64] Second, some OCCs go even further and assert that, because of problems with marketing equal access services until they are widely available in an area, we should abandon the end-office approach to phasing out the discount and provide instead that the discount will stay in

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[63] Specifically the *Second Reconsideration Order* provides:

> OCCs that receive equal access will pay the same per minute charges that are assessed for MTS and WATS usage as equal access becomes available in each end office. Access charges in end offices not converted to equal access shall continue to be assessed at a non-premium rate.
>
> If equal access is available but the OCC does not elect to use it, the OCC will normally pay the equivalent of the subelement 1 charge for Local Switching . . . and the full equal access charge for other elements.

Second Reconsideration Order at paras. 79-80 (footnote and paragraph numbers omitted).

[64] Western Union Petition at 5-6; USTS Opposition at 3-6; GTE Sprint Reply at 2-5.

effect until all or almost all the end offices in a LATA have been converted to equal access.[65]

28. We decline these invitations to abandon our end-office approach to phasing out the non-premium discount in favor of requirements of "tandem access" or LATA-wide equal access. It was our intent in the *Second Reconsideration Order* to tie the phase-out of the discount to the phase-in of equal access that would be taking place pursuant to the schedule established in the *MFJ*. For the purposes of that schedule, equal access services are deemed to be available in all end offices that are actually converted to equal access, and not only in those converted end offices accessible through access tandems or in LATAs in which virtually all end offices are converted.[66] Furthermore, the 55 percent discount and the end office-by-end-office approach to phasing out that discount are complementary parts of the transitional plan for non-premium access we adopted in the *Second Reconsideration Order*. Were we to accept one of the alternative approaches to phasing out the discount suggested by the petitioning OCCs, we would find it necessary to consider reducing the level of the discount below 55 percent. It is not clear that these petitioners would find the combined results of such complementary changes to be in their best interests. In any event, we find that making either type of change at this time would not be in the best interests of the industry as a whole or the public.

29. A number of petitioners claim there is a different type of problem with our end-office approach to phasing out the discount, which involves its practical implementation. Both exchange and interexchange carriers have asserted that it is generally not possible to determine the originating end office for FGA traffic; therefore where some, but not all, end offices

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[65] Allnet Petition at 7; SBS Petition at 2-9; Lexitel Opposition at 9-13; SBS Opposition at 11-13; SBS Reply at 2-6; Allnet Reply at 3-4; GTE Sprint Reply at 2-5.

[66] We wish to clarify two points about our end-office approach to phasing out the discount, in light of our reliance, in part, on the *MFJ* equal access schedule in fashioning that approach. First, while the *MFJ* schedule applies only to the BOCs, we intend for the end-office approach to the phase-out of the non-premium discount to apply to the independent telephone companies as well. GTE will be implementing equal access pursuant to a consent decree entered into with the Department of Justice to settle an antitrust challenge to its acquisition of the OCC, Sprint. *See United States v. GTE Corp*, No. 83-1298 (D.D.C. December 13, 1984). Other independent telephone companies will be implementing equal access in certain end offices pursuant to the *Phase III Order, supra* note 4. Second, while the *MFJ* provides that, subject to certain exceptions, all end offices should offer equal access services by September 1, 1986 (*See MFJ supra* note 4, at App. B, para. A.1), it is not our intent that the discount automatically terminate on that or any other particular date. There will still be BOC end offices unconverted after September 1, 1986, because they fall within one of the exceptions provided in the decree. Furthermore, it is likely that many independent telephone company end offices will not be converted by that date. In the absence of any future modifications to our rules, the discount will continue to apply in all end offices not in fact converted to equal access.

in an area have been converted to equal access, it is not possible to determine precisely how much originating FGA traffic should be charged at premium, and how much at non-premium, rates.[67] As a result, these parties argue that our intent in mandating an end-office approach to phasing out the non-premium discount can best be realized by allocating originating FGA traffic between converted and unconverted end offices on some estimated basis.

30. Subsequent to the conclusion of the pleading cycle in this reconsideration round, the twenty-two BOCs submitted a petition for waiver of section 69.206 of our rules to permit them to implement a system for charging premium and non-premium rates for FGA and FGB traffic in areas partially converted to equal access.[68] The BOCs proposed formulas for estimating the amount of premium and non-premium originating FGA traffic and for making adjustments in the non-premium flat rate charged for FGA lines and FGB trunks to reflect the fact that some of the traffic on those lines and trunks would be billed at premium rates.[69] We invited comments on the BOC proposal from interested parties,[70] and a large number of comments and replies were filed. These comments and replies include most of the arguments raised on this issue in the third reconsideration pleadings. Indeed, those arguments in many cases are presented in a more complete and focused fashion in the BOC Waiver Petition pleadings than in the reconsideration pleadings. In order to consider fully the issues involved in implementing our end-office approach to phasing out the non-premium discount, we have decided to resolve these issues in a separate order addressing the BOC proposal. The reconsideration pleadings that address this aspect of the end-office approach to phasing out the discount have been incorporated into the record of the waiver request and will be dealt with in that separate order.

2. Notice of end office conversions

31. In the *Second Reconsideration Order*, we provided that premium access rates for FGA and FGB traffic in an end office where equal access is available may not be imposed on an OCC until six months after it

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[67] *See, e.g.*, Pacific Petition at 3-6; MCI Opposition at 21-25.

[68] Petition for Waiver, CC Docket Nos. 83-1145, Phase I, and 78-72, Phase I (July 18, 1984) (hereinafter "BOC Waiver Petition").

[69] By letter dated August 31, 1984, the Chief, Common Carrier Bureau informed the BOCs that they could implement their proposal on an interim basis pending a final decision on the proposal by the Commission. NECA filed tariff revisions implementing this proposal in accordance with the August 31 letter, and the Commission subsequently denied petitions file by ARINC, Allnet, Lexitel, Republic, and SBS opposing the tariff revisions. Memorandum Opinion and Order, Transmittal Nos. 21 and 28, Mimeo No. 1244 (released December 7, 1984).

[70] Public Notice, "Pleading Cycle Established for Comments on Bell Operating Companies' Petition" (released July 25, 1984).

receives notice that the end office will be converted to equal access.[71] Allnet argues that, because the BOCs have been providing OCCs with many different kinds of information concerning planned conversions of end offices, including tentative, long-term conversion schedules and informal communications, OCCs are confused as to what constitutes the "notice" required by the Commission. Allnet contends that the situation would be improved if we were to establish certain additional, formal requirements for such notice.[72] No other parties addressed this issue in their pleadings.

32. The purpose of the six months' notice requirement is to provide sufficient time for the OCCs to respond to the opportunity for equal access.[73] We agree with Allnet that tentative schedules of end office conversions and informal communications between exchange carrier and interexchange carrier personnel, while no doubt useful, are not adequate substitutes for the requisite six months' notice. We do not agree, however, that detailed specification of the form and sufficiency of the conversion notice is necessary at this time. Any reasonable form of notice is acceptable provided that two conditions are met: the exchange carrier clearly identifies the requisite notice as such, and the notice unambiguously sets out the end offices to be converted and the dates of those conversions.[74]

33. It appears that the BOCs have not been withholding information concerning conversion schedules from the OCCs. Indeed, Allnet's arguments seem to be that it is receiving too much, rather than too little, information on end-office conversions. The clarifications concerning the notice requirements we have provided in this Order should alleviate whatever confusion may have existed among the carriers. Absent any further indications of problems with the end-office conversion notice provided by exchange carriers, we will not add further requirements to the access rules on the form and sufficiency of that notice.

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[71] *See Second Reconsideration Order* at para. 80; section 69.205(a) of the Commission's Rules, 47 C.F.R. § 69.205(a)(1984).

[72] Allnet Petition at 7-8.

[73] *Second Reconsideration Order* at para. 80 n.42.

[74] Ameritech, for example, has proposed providing its end office conversion notices in newsletters it sends to its access customers. *See* Letter from Ameritech to the Commission (April 2, 1984) (CC Docket 78-72). Ameritech's proposal is satisfactory provided its customers are informed that the requisite six months' notice will appear in the newsletter, the notice is clearly distinguishable from any other information on end office conversions that may appear in the newsletter, and it unambiguously identifies the end offices to be converted and the dates on which equal access will be available in those end offices.

C. Treatment of Closed End WATS Access Lines

34. In the *Second Reconsideration Order*, we amended the access charge rules to conform the treatment of closed end WATS access lines under those rules to the treatment of such lines under the separations rules.[75] Prior to the *Second Reconsideration Order*, the access charge rules included both closed end WATS lines and private lines in the special access category. The separations rules, on the other hand, include all WATS access lines and all ordinary subscriber access lines in the same separations category, while access lines for private line service are placed in a separate category. The combined investment in the former category is apportioned between the inter- and instrastate jurisdictions through the application of the frozen Subscriber Plant Factor (SPF), while investment in the latter category is directly assigned to the appropriate jurisdiction.[76] Concluding in the *Second Reconsideration Order* that these inconsistent apportionment procedures could produce anomalous results, we decided that for access charge purposes closed end WATS lines should be moved into the switched access category, with the interstate allocation of investment in such lines included in the common line element. As a result, closed end WATS access minutes are subject to the same carrier common line charges as MTS and open end WATS access minutes, and WATS subscribers are subject to customer line charges.

35. A number of parties object to this change in treatment of the closed ends of WATS lines.[77] They argue that such lines should be treated like other dedicated lines, which are included in the special access category and are not assessed carrier common line charges. AT&T in

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[75] *Second Reconsideration Order* at paras. 102-06. The Joint Board had previously recommended that we amend the separations rules to provide for the direct assignment of investment in closed end WATS lines to the federal or state jurisdiction in the same manner as private lines. Amendment of Part 67, Second Recommended Decision and Order, 48 Fed. Reg. 46,556, paras. 81-82 (1983). A number of OCCs objected to direct assignment of WATS lines on the grounds that this treatment — at least if implemented without a substantial phase-in period — would cause distortions in the marketplace that would operate to their disadvantage. We decided to defer any changes in the separations treatment of WATS access lines pending further study by the Joint Board. Amendment of Part 67, Decision and Order, 96 FCC 2d 781 (1984) (hereinafter *Separations Order*), *reconsideration pending, appeal docketed sub nom. Rural Radio Coalition v. FCC*, No. 84-1110 and consolidated appeals No. 84-1125 and No. 84-1139 (D.C. Cir. March 22, 1984).

[76] *See* section 67.124 of the Commission's Rules, 47 C.F.R. § 67.124 (1984). The Commission has adopted a Federal-State Joint Board proposal to replace SPF with a nationwide, uniform 25 percent interstate allocation factor, which will be phased in beginning January 1, 1986. See *Separations Order, supra* note 76, at paras. 3, 49-51; *Decision and Order, supra* note 15, at paras. 1, 5 (extending phase-in period).

[77] AT&T Petition at 3-9; Pacific Petition at 8-10; Rochester Opposition at 10-11; Teltec Opposition at 1-2; Pacific Reply at 13-15; National Data Petition at 1-15 and Reply at 1-10.

particular argues that the current treatment of WATS lines results in substantial discrimination against its WATS service because OCC WATS-type services use the same type of dedicated line providing the same access as AT&T's WATS, but are subject only to special access charges. These parties also argue that the access rules need not reflect the separations treatment of WATS lines and that our concerns about consistency in this area are misplaced. Other parties support our current treatment of WATS closed ends.[78] In particular, a number of OCCs challenge AT&T's assertion that the access they receive for their WATS-type services is identical to that provided AT&T for its WATS service.

36. Those seeking a change in the access charge treatment of the closed ends of WATS lines have not presented any arguments we have not already considered in the *Second Reconsideration Order*. The present access charge treatment of closed end WATS lines derives from our conclusion in the *Second Reconsideration Order* that, pending further Joint Board review of the separations treatment of WATS access lines, it is undesirable to treat such lines and private lines consistently for the purpose of recovering interstate investment where the method of apportioning investment in these lines between jurisdictions is different.[79] Petitioners have presented nothing in this reconsideration round to convince us to alter that conclusion.

37. In addition, Pacific objects to the assessment of customer line charges on intrastate WATS lines, arguing that the Commission has no jurisdiction over intrastate lines. As stated above, the separations rules presently apportion federal and state investment in all WATS lines through the application of frozen SPF and do not distinguish between interstate and intrastate WATS lines.[80] Thus, a portion of the investment in each intrastate WATS line is assigned to interstate operations and must be recovered through interstate charges. In these circumstances, the application of interstate charges (such as customer line charges) to recover the interstate share of the costs of such lines is proper and within our jurisdiction.

38. Finally, Western Union has suggested an amendment to section 69.305 of our rules to reflect the switched access treatment of closed end WATS lines adopted in the *Second Reconsideration Order*.[81] As presently written, the Part 69 rules distinguish between two parts of a WATS access line: that portion running between a customer's premises and the

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[78] ALTEL Opposition at 3-4; GTE Sprint Opposition at 9-11; MCI Opposition at 12-16; SBS Opposition at 8-11; USTS Opposition at 15-16.

[79] The Joint Board is presently reviewing the separations treatment of closed end WATS lines. Amendment of Part 67, Order Inviting Comments, 49 Fed. Reg. 18,746 (1984) (hereinafter *Order Inviting Comments*).

[80] *See supra* note 76 and accompanying text.

[81] Western Union Petition at 2-3. *See also* ARINC Opposition at 7-8.

first end office — which is treated as customer outside plant (customer OSP) — and that portion running from that end office to the WATS screening office — which is treated as carrier outside plant (carrier OSP). The interstate allocation of investment in WATS access lines is assigned to the various access charge rate elements pursuant to section 69.304 for customer OSP and section 69.305 for carrier OSP. Western Union argues that, when we modified our treatment of closed end WATS lines in the *Second Reconsideration Order*, we properly amended section 69.304 to reflect that change, but failed to make the necessary, corresponding amendment to section 69.305. As a result, the second part (*i.e.*, the carrier OSP part) of the WATS access line is still treated as a special access line. We agree with Western Union that it was our intent to include both parts of WATS closed ends in the switched access category.[82] Accordingly, we are adopting Western Union's proposal to amend section 69.305 so that carrier OSP used to provide WATS closed end access is included in the switched access category.[83]

D. Implementation of Multiline Business Customer Line Charges

39. In the *Second Reconsideration Order*, we deferred the implementation of residential and single-line business customer line charges until June 1, 1985, to permit us to conduct supplemental proceedings on how best to ensure that such charges do not have a negative impact on universal service or small telephone companies. We found that customer line charges for multiline businesses, on the other hand, do not raise comparable concerns, and such charges were not deferred.

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[82] Western Union's proposal has not been opposed on its merits. AT&T argues against the proposal, but only on the ground that both parts of WATS closed end lines should be included in the special access category. AT&T Opposition at 21. ARINC, while urging a prompt review of the separations treatment of WATS lines and adoption of the Joint Board recommendation for direct assignment of such lines, supports Western Union's position that given our current treatment of WATS closed ends, the interoffice part of those lines belongs in the switched access category. ARINC Opposition at 5-8.

[83] The amended rule appears in Appendix B. In response to a request by NECA, the Bureau has granted a waiver of section 69.305 of the rules that allows NECA to treat the carrier OSP portion of closed end WATS lines in a manner consistent with the amendment we are adopting today. Memorandum Opinion and Order in CC Docket No. 78-72 and CC Docket No. 83-1145, Mimeo No. 6929 (released October 1, 1984). The Bureau found that grant of a waiver to permit the allocation of the entire costs of WATS access lines to switched access was necessary in light of our *April Tariff Order, supra* note 9, which required exchange carriers to price WATS access lines entirely under the switched access provisions of the tariffs. The Commission continued the waiver and extended it to non-NECA exchange carriers in the *Special Access Tariff Order, supra* note 10, at para. 68 n.60.

40. Several parties have challenged these findings and urge modifications in our approach to customer line charges.[84] The National Federation of Independent Business (NFIB) argues that, under our plan, small businesses are bearing a disproportionate share of the redistribution of interstate NTS costs.[85] NFIB requests that the Commission base the level of customer line charges assessed a subscriber on the corresponding savings realized by that subscriber as the result of reductions in interstate toll charges. Thus, under NFIB's proposal, customer line charges would vary according to a subscriber's usage of interstate telephone service.[86] NFIB does not present any details on how to effectuate its proposal, but encourages the Commission to undertake a further proceeding to design a usage-based approach to the application of customer line charges.[87] In support of its arguments, NFIB relies on a survey of its membership purportedly showing that many small businesses make few interstate calls. NFIB asserts that the survey demonstrates the unfairness of applying the full customer line charge to all multiline businesses.[88] Numerous parties have objected to NFIB's petition. Ad Hoc, AT&T, Southwestern Bell, and UTS argue that NFIB's petition amounts to an untimely attack on the use of flat-rate customer line charges to recover interstate NTS costs.[89] These parties also level a variety of attacks on the validity of the NFIB survey. ARINC argues that NFIB's complaints would be more properly addressed in the Commission's separate investigation of the impact of customer line charges on small business.[90]

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[84] Clear Lake Independent Telephone Company (Clear Lake) asks us either to defer the multiline business charges until residential and single-line business charges go into effect or to redefine "multiline" as five or more lines. Clear Lake's petition has been considered and denied in the *May Cost Order, supra* note 9, at para. 124.

[85] NFIB Petition at 12. NFIB's petition seeks reconsideration of the *May Cost Order, supra* note 9. Because the arguments relate to the policy reasons for implementing the multiline business charge, we have incorporated NFIB's petition and the responsive pleadings into the record of this third reconsideration round.

[86] NFIB Petition at 13-15.

[87] Until a further study is completed, NFIB recommends a suspension or reduction of the current multiline business charge, particularly for those businesses with six or fewer line. *Id.* at 15.

[88] *Id.* at 3-5.

[89] Ad Hoc Opposition to NFIB Petition at 3-4; AT&T Opposition to NFIB Petition at 3-8; Southwestern Bell Opposition to NFIB Petition at 1-3; and UTS Opposition to NFIB Petition at 1-8.

[90] ARINC Opposition to NFIB Petition at 1-4 (citing Public Notice, "Commission Seeks Information on the Effect of Federal Decisions on Local Rates and Services", Mimeo No. 5346 (released July 12, 1984)). The comments filed in response to this Public Notice were analyzed in the *Michigan II Report, supra* note 18, which concluded that transitional relief for small businesses is not necessary to preserve universal service to those businesses at reasonable rates. *Id.* at 56. We recently invited further comments on this

41. We agree with the opponents of NFIB's petition that its proposal constitutes a belated challenge to the use of flat-rate customer line charges. These charges are designed to recover NTS costs of local exchange plant, which do not vary according to the use of that plant. Attempts to tie customer line charges to reductions in interstate toll costs would differentiate the charges paid to recover NTS costs on a usage basis. This proposal would be contrary to the basic economic rationale underlying the access charge plan — that is, charges should be based on costs and, absent compelling public policy reasons to the contrary, costs that do not vary with usage should be recovered through charges that do not vary with usage. In addition, the implementation of such a scheme appears to be unduly cumbersome and involves substantial administrative costs.[91]

42. Finally, NFIB's concerns do not reflect the long-term benefits to small businesses from the changes in the pricing of interstate telephone services that will result from the access charge plan. That plan will not only lead to reductions in interstate toll rates, thereby providing opportunities for small business to make use of telecommunications services that perhaps are now too expensive, but it will also increase the efficiency of the public switched network and discourage uneconomic bypass of the network. The economic and technological vitality of the public network is obviously of crucial importance to small businesses, which — unlike major corporations — lack the ability to participate in the telecommunications revolution by constructing or leasing their own private telephone systems or otherwise avoiding the use of the public network in making interstate calls. In the long run, small businesses should enjoy lower telecommunications costs and better and more varied services as a result of the access charge plan.

43. Rural Telephone Company ("Rural") states that its local exchange tariff does not distinguish between residential and business subscribers because such a distinction would be arbitrary in its operating territory — rural Idaho and Nevada — where there are many farmers, ranchers, and miners whose residences serve as their places of business. As a result, Rural argues, it does not know which of its customers should be assessed

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report and two other studies addressing the impact of customer line charges on small businesses. MTS/WATS Market Structure and Amendment of Part 67, Order Inviting Comments, 50 Fed. Reg. 2594 (1985).

[91] Furthermore, NFIB's survey, which provides the basis for NFIB's challenge to the multiline business customer line charge, is flawed. Only 12,400 of NFIB's 560,000 members responded to the mail survey. The low response rate of a little over 2 percent undermines the usefulness of the survey. In addition to this probable source of bias, NFIB itself admits that potential respondents were not selected by random sampling, and therefore the survey lacks statistical validity. NFIB Petition at 3.

customer line charges.[92] Rural is concerned that, since our rules provide that a line is "residential" if the rate for the line "is described as a residential rate in the local exchange service tariff,"[93] all of Rural's undifferentiated lines might be deemed business lines for purposes of assessing customer line charges.

44. With respect to these complaints, we note first that any problems Rural might have with the business/residential distinction would apply only to multiline subscribers, since all single-line subscribers, whether residential or business, will pay the same customer line charge, *i.e.*, $1.00 beginning in June 1985 and $2.00 beginning in June 1986.[94] We do not know as a practical matter whether, among the relatively small number of subscribers in Rural's area,[95] there are a substantial number of multiline subscribers who might fairly be considered residential customers. Second, we doubt whether subscribers who have ordered multiple lines to a business/residence location are likely to cancel telephone service entirely as the result of customer line charges. Thus, it does not appear that the problem Rural has identified raises the universal service concerns that led us to defer some customer line charges. In any event, while Rural asks us to modify our rules, it is unclear what form of modification it is seeking. To the extent Rural is asking us to defer multiline business customer line charges or limit them to the single-line business rate, we decline to do so.[96] To the extent Rural is asking us to provide an alternative classification system for residences and businesses, we reiterate the position we have expressed previously in this proceeding, that problems of identifying and classifying residential and business subscribers are best left in the first instance to the local exchange companies and the state regulatory

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[92] Rural Petition at 1-2.

[93] Section 69.202(e) of the Commission's Rules, 47 C.F.R. §69.202(e) (1984).

[94] Rural also complains that it will have difficulty determining when it is providing a customer with more than one line, particularly since it operates in several exchanges in two states. Rural Petition at 1. We note that the NECA tariff, which Rural indicates it joins in, provides that a multiline subscriber is one "provided more than one local exchange service in a state by the same Telephone Company." NECA Tariff FCC No. 1, §§ 4.6(D), (E), (F). Thus, Rural need only identify the subscribers who receive more than one line in a given state. We do not think this places an unreasonable burden on Rural or other telephone companies.

[95] Rural states that it serves 140 people. Rural Petition at 1.

[96] *See supra* note 84.

agencies.[97] Accordingly, we will make no modifications to the application of the multiline business customer line charge at this time.

E. Miscellaneous Issues

1. The AT&T Emergency Petition

45. AT&T filed a petition on February 27, 1984, which it described as an emergency petition to reconsider both the *Second Reconsideration Order* and the *ECA Tariff Order* ("AT&T Emergency Petition"). AT&T asserted that emergency reconsideration was necessary because the combined effect of those two orders would reduce its return from interstate services to a confiscatory level. AT&T proposed that this result be avoided by reducing the differential between premium and non-premium charges and by reducing the exchange carrier access charges by the amount of any "shortfall" in revenues resulting from that differential.

46. The AT&T Emergency Petition did not present any new arguments or information with respect to the appropriate differential for non-premium access. Accordingly, we will deny that petition insofar as it seeks a reduction in the total differential established in the *Second Reconsideration Order*.

47. The AT&T contention that the access charges should be reduced to enable AT&T to earn a return that would not be confiscatory was considered in connection with the investigation of access and divestiture related tariffs in CC Docket No. 83-1145. In the *May Cost Order*, we stated:

> AT&T in its emergency petition contended that the *Second Reconsideration Order* and the access tariffs would have the effect of forcing upon it a confiscatorily low return. Its proposed solution was to increase OCC rates and reduce BOC rates of return until equal access is available. Our analysis and conclusions in this order, however, make it unnecessary to consider AT&T's proposal. Its factual premise is in error or has been altered by our decisions on proper access rates. AT&T, we conclude, can offer at least a 6.1 percent rate reduction and still earn the allowed 12.75 percent return. We therefore do not address whether, if the facts were different, or indeed if the facts should change, some or all of the rule changes AT&T seeks should be granted. We could dismiss AT&T's Emergency Petition at this time. Out of an abundance of caution, however, we will hold it in abeyance until we have had an opportunity to review six months of actual operating results under the rates prescribed herein.[98]

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[97] *See Second Reconsideration Order* at para. 49 n.32. Rural asks, as an alternative to our amending our rules, that we grant it a waiver of our rules. But, as with its request for a rule amendment, Rural does not identify the specific relief it seeks in the form of a waiver. If it is seeking permission to implement, in its special circumstances, a reasonable method for identifying residential multiline subscribers, we would be willing to consider any specific proposal Rural may develop. On the other hand, if it is seeking permission simply to treat all its multiline subscribers as residences (another possible interpretation of its request), the waiver is denied.

[98] *May Cost Order, supra* note 9, at para. 112.

48. We have now reviewed AT&T's operating results for the June-November 1984 period. The data submitted to us indicate that the AT&T achieved interstate rate of return for that period was 9.16%.[99] This figure reflects the combined return for MTS, WATS, and private line services. AT&T has recently stated that continuation of existing private line rates would produce a return of 6.2% for interstate private line services. We infer that the achieved rate of return for interstate MTS and WATS must have exceeded the 9.16% combined return.[100] Thus, actual experience confirms that no changes are required in the rules relating to switched access rates to avoid reducing the AT&T return from switched services to a confiscatory level. Therefore, we deny the AT&T Emergency Petition.

2. Treatment of Maritime Radio Common Carriers

49. In the *Second Reconsideration Order*, we examined whether radio common carriers in the public mobile service (RCCs) were subject to access charges as end users, interexchange carriers, or users of exchange facilities subject to special access surcharges.[101] We held that, for purposes of the Part 69 rules, RCCs were neither end users (except to the extent they use exchange facilities for administrative purposes), nor interexchange carriers (because they provide exchange, not interexchange, communications services). Furthermore, we held that the jurisdictionally interstate interexchange lines subject to special access surcharges did not include the facilities provided to RCCs. We concluded, therefore, that access charges filed in compliance with the Part 69 rules should not be imposed on RCCs.[102] Mobile Marine Radio, Inc., a common carrier serving maritime users, requests clarification of our ruling so as to provide explicitly that maritime radio common carriers, like RCCs, are not subject to access charges.

50. We agree that maritime radio common carriers should be treated in the same manner as RCCs. Although maritime carriers and RCCs are regulated under different parts of the our rules,[103] they provide similar services and stand in a similar relationship to the local exchange carriers.[104] As in the case of the RCCs, interconnection of maritime

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[99] AT&T Communications Interstate Financial and Operating Data Summary, Interstate Monthly Report No. 1, for June 1984 — November 1984.

[100] Letter from R.L. Rains, AT&T Communications Administration of Rates Tariffs, to Secretary, Federal Communications Commission (January 18, 1985).

[101] *Second Reconsideration Order* at paras. 144-49.

[102] *Id.* at paras. 148-49.

[103] The maritime carriers are regulated under Part 81 of the Commission's Rules, while the RCCs are regulated under Part 22.

[104] While it is true that maritime stations often serve much larger areas than those typically served by an RCC, the size of the service area does not determine whether a carrier is providing exchange-type service. Indeed, cellular operators may in some cases be authorized to provide service to land areas encompassing thousands of square miles.

carriers with exchange telephone companies is governed by agreements negotiated between the parties, a process we did not intend to supplant when we promulgated the Part 69 rules and required that charges for interstate access services be assessed pursuant to access tariffs. By contrast, the ENFIA rates, which we did intend to replace with access charges, did not apply to maritime carriers. Furthermore, VHF and coastal harbor maritime mobile stations are classified as mobile radio services providing "exchange telecommunications services" under section II(D) (3) of the MFJ.[105] Thus, we conclude that access charges provided for in Part 69 should not be imposed on maritime radio common carriers.[106]

3. Access Charges for FX-type Services

51. The Ad Hoc Committee on Telecommunications Users ("Ad Hoc") argues that, in light of the significant differences between the access services used by MTS-type services and FX-type services and in order to "resolve the current uncertainty facing the end users who purchase FX-type service," we should establish different access charge treatments for the two types of services.[107] Ad Hoc argues that rates for FX users will increase dramatically as end offices are converted to equal access, only to decline again as NTS costs are phased out of carrier charges and into customer line charges. This fluctuation in rates, it argues, will produce unnecessary price dislocations for FX service.[108] AT&T opposes the request, and argues that FX open ends and MTS-type services utilize local exchange services in the same manner, impose the same access costs on the exchange, and should be assessed the same assess charges. AT&T concludes that, "FX customers now, in fact, obtain a substantial interim discount only because of Commission concerns regarding the *value* of line-side access when utilized for MTS-type services — a concern not even applicable to FX customers."[109]

See Cellular Lottery Rulemaking, Report and Order, 98 FCC 2d 175 (1985), *reconsideration pending.*

[105] *Memorandum of the Court,* Civil Action No. 82-0192 (D.D.C. November 1, 1983).

[106] We also take this opportunity to clarify the treatment of Specialized Mobile Radio Services (SMRS) lilcensees under the access charge rules. SMRS is a private carrier service providing mobile communications to users eligible under Part 90 of our rules. Under section 332(c) (2) of the Communications Act, an SMRS — like other firms offering private land mobile service — is not "deemed a common carrier for any purpose under this chapter." 47 U.S.C. §332(c) (2) (1982). Consequently, since the SMRS licensee is neither an exchange carrier nor an interexchange carrier, it is an end user and must be charged the applicable business customer line charge.

[107] Ad Hoc Petition at 7-8.

[108] Ad Hoc Reply at 2-8; *see also* ARINC Opposition at 2-5.

[109] AT&T Opposition at 9.

52. In the *Second Reconsideration Order*, we considered and rejected the substance of Ad Hoc's position that the access charge plan be modified to provide that open end FX lines be treated differently from MTS-WATS equivalent services.[110] Nothing has occurred in the interim that would cause us to revise that conclusion. Accordingly, we deny the Ad Hoc petition.

4. Computation of Local Switching Charges

53. Allnet argues that when we increased the discount for non-premium access from 35 percent to 55 percent in the *Second Reconsideration Order*, we mistakenly failed to reflect this change in section 69.205(c) of the rules, which sets out the method for computing transitional premium charges for local switching elements LS1 and LS2. As a result, the charge for an LS1 minute is computed by multiplying the charge for an LS2 minute by .65 (reflecting, according to Allnet, the previous 35 percent discount), rather than by .45 (which would reflect the current 55 percent discount). Allnet asks us to amend section 69.205(c) by substituting .45 for .65 as the discount factor applicable to LS1.[111] NYNEX argues in response that Allnet has confused the discount applicable to premium local switching minutes after equal access is available, with the non-premium discount applicable to all access elements until equal access becomes available.[112] NYNEX points out that the former, which is derived from the toll weighting factor, is based on differences in switching costs and is unrelated to the non-premium discount.[113]

54. On this point, Allnet is wrong, and NYNEX is right. While prior to the *Second Reconsideration Order* the LS1 discount and the transitional discount for non-premium access were the same (*i.e.*, 35 percent), the two factors are, as NYNEX argues, completely unrelated. Accordingly,

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[110] *Second Reconsideration Order* at para. 99.

[111] Allnet Petition at 8-9.

[112] NYNEX Opposition at 11-12.

[113] We held in the *Second Reconsideration Order* that, as equal access was phased in, the 55 percent discount for non-premium access would be phased out. Thus, we provided that an OCC continuing to use inferior connections after equal access became available would pay a premium rate for such connections. However, we also provided that such an OCC would "pay a lower premium rate for Local Switching to reflect differences in switching costs." *Second Reconsideration Order* at para. 76 n.40; *see also id.* at para. 80. This lower charge is described in the access rules as the LS1 charge and, for the transition provided in Subpart C of the Part 69 rules, is set at 65% of the LS2 charge, which is the local switching charge applicable to equal access services. As NYNEX argues, this .65 factor is based on the toll weighting factor, which is used in the separations process to apportion the traffic sensitive costs of switching equipment "to reflect the difference in average cost per toll minute of use as compared to the average cost per exchange minute of use." Section 67.138(c) of the Commission's Rules, 47 C.F.R. 67.138(c) (1984). *See Access Charge Order* at paras. 217-23.

contrary to Allnet's suggestion, section 69.205(c) should not be amended to reflect the change in the non-premium discount from 35 to 55 percent.

5. Adjustments to Access Minutes

55. Allnet argues that the Commission should recognize intracompany traffic, rounded minutes, and off-peak usage as deductions from access minutes.[114] Allnet asserts that, while it raised these issues in the second reconsideration round, we did not specifically address them in the *Second Reconsideration Order*. NYNEX argues that Allnet's requests are untimely and repetitious.[115] AT&T agrees with NYNEX, but voices support for lower access charges for off-peak usage of exchange facilities for all carriers.[116]

56. We agree that Allnet's arguments are untimely. Allnet is essentially seeking to apply to access minutes certain deductions that were applied to "billed minutes," which was the measure of usage under the ENFIA arrangements.[117] Those discounts were not included in the Part 69 rules as adopted in the *Access Charge Order*, which used "conversation minutes" as the measure of usage. In the *First Reconsideration Order*, we changed the term "conversation minutes" to "access minutes" and defined the latter in order to clarify when the measurement period begins and ends at each end of a call.[118] We again, however, did not provide for any of the deductions sought by Allnet. Thus, Allnet's requests to incorporate these deductions into the access charge rules were stale when raised in the second reconsideration round, and were properly included in the requests "to reconsider facets of the access charge plan adopted in the *Access Charge Order* that the *Reconsideration Order* left unchanged" that we denied as "untimely or repetitious" in the *Second Reconsideration Order*.[119] Accordingly, they are denied again as untimely and repetitious.

6. Apportionment of Investment in Category 6 Central Office Equipment

57. SBS argues that the toll weighting factor applied to Category 6 Traffic Sensitive Central Office Equipment (COE) costs, which are recovered through local switching charges, should also be applied to Category 6 NTS COE costs, which are recovered through line termination

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[114] Allnet Petition at 1-3; Allnet Reply at 4.

[115] NYNEX Opposition at 12-13.

[116] AT&T Opposition at 7-8.

[117] *See, e.g.*, AT&T Co., Memorandum Opinion and Order, 91 FCC 2d 1079 (1982), *modified on reconsideration*, 93 FCC 2d 739 (1983) *aff'd in part, remanded on other grounds sub. nom. MCI Telecommunications Corp.* v. *FCC*, 712 F.2d 517 (D.C.Cir. 1983).

[118] *First Reconsideration Order* at paras. 70-74.

[119] *Second Reconsideration Order* at para. 140.

charges.[120] Not only is SBS' complaint two reconsideration rounds too late,[121] but it is also misplaced in this proceeding. The treatment of Category 6 COE investment in the access charge rules derives from the treatment of that investment in the separation rules. We recently adopted a Joint Board recommendation that the NTS portion of Category 6 COE investment continue to be allocated pursuant to the frozen SPF pending a comprehensive review of all COE separations issues.[122] SBS will, of course, be free to make its views on these issues known in that proceeding.

7. Segregation of Common Line Revenue Requirement

58. In the *Second Reconsideration Order*, we amended sections of Subpart F of Part 69 of our rules, Segregation of Common Line Revenue Requirement, to reflect changes we made at that time in the transitional plan for customer line charges. We take this opportunity to make certain perfecting amendments to that Subpart. First, section 69.503 was deleted from the rules in the *Second Reconsideration Order*, but a cross-reference to that section remains in sectiodn 69.501(e). We now amend the latter section to delete this cross-reference.

59. Second, section 69.502, which governs the apportionment of the "base factor portion" of the common line revenue requirement, was limited by its terms to the period ending May 31, 1985. This limitation was to apply pending our reexamination of the transitional plan for residential and single-line business customer line charges. In light of our recent decision establishing a $1.00 charge for such customers for the year June 1, 1985 to May 31, 1986, and a $2.00 charge thereafter, the base factor allocation rule set out in section 69.502 should be extended past May 31, 1985.[123] We inadvertently failed to make the necessary change to this section when we adopted the new transitional rules for customer line charges, but we correct that situation by amending the rule today to delete the limitation to the period ending May 31, 1985.

III. Ordering Clauses

60. Accordingly, IT IS HEREBY ORDERED, That pursuant to 47 U.S.C. §§ 154(i) and (j), 201, 202, 203, 205, 218, and 403 and 5 U.S.C. § 553,

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[120] SBS Petition at 9-11.

[121] The relevant parts of sections 69.106(b) and 69.306(g), which govern the allocation and recovery of Category 6 COE (local dial switching equipment) NTS costs, were promulgated in the *Access Charge Order*. Hence, SBS' complaint about the absence of the a toll weighting factor in these rules should have been raised in the first reconsideration round.

[122] *See Decision and Order*, *supra* note 15.

[123] *See id.*

the *Second Reconsideration Order* adopted in this proceeding is modified to the extent set forth in this *Memorandum Opinion and Order*.

61. IT IS FURTHER ORDERED, That the petitions for further reconsideration or clarification are granted to the extent set forth in this *Memorandum Opinion and Order*, and are otherwise denied.

62. IT IS FURTHER ORDERED, That the Petition for Clarification filed by Lexitel is dismissed.

63. IT IS FURTHER ORDERED, That the Petition for Declaratory Relief filed by TDX is dismissed.

64. IT IS FURTHER ORDERED, That the Supplement to the Petition for Clarification filed by Allnet is accepted.

65. IT IS FURTHER ORDERED, That the AT&T Emergency Petition, as described herein, is denied.

66. IT IS FURTHER ORDERED, That the Motion to Accept Late Filed Pleading filed by NYNEX is granted.

67. IT IS FURTHER ORDERED, That Sections 69.205, 69.206, and 69.207 of the Commission's rules are amended as set forth in Appendix B, effective January 1, 1986.

68. IT IS FURTHER ORDERED, That Sections 69.305, 69.501, and 69.502 of the Commission's rules are amended as set forth in Appendix B, effective 30 days after publication in the Federal Register.

69. IT IS FURTHER ORDERED, That the Secretary shall cause this order to be published in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION

WILLIAM J. TRICARICO, *Secretary*

*Appendix A-may be seen in FCC's Dockets Branch, 1919 M Street, N.W., Wash., D.C. 20554.

APPENDIX B

47 C.F.R. Part 69 is amended to read as follows:

1. Section 69.205(b) of our rules is revised to read as follows:

69.205 Transitional Premium Charges.

(a)

* * *

(b) The transitional premium charges for the Carrier Common Line, Line Termination and Intercept elements shall be expressed in dollars and cents per access minute. Such charges shall be computed by dividing the revenue requirement for each such element by the sum of the projected premium access minutes for such element for such period and a number that is computed by multiplying the projected non-premium access minutes for each element for such period by .45.

* * * * *

2. Section 69.206 is revised in its entirety to read as follows:

69.206 Transitional Non-Premium Charges for MTS-WATS Equivalent Services.

(a) Charges that are computed in accordance with this section shall be assessed upon interexchange carriers or other persons that receive access that is not deemed to be premium access in lieu of carrier charges that are computed in accordance with §§ 69.105 - 69.108 and 69.111 - 69.112.

(b) The transitional non-premium charges for the Carrier Common Line, Line Termination and Intercept elements shall be computed by multiplying the premium charge for such element by .45.

(c) The transitional non-premium charge for the Local Switching element shall be computed by multiplying a hypothetical premium charge for such element by .45. The hypothetical premium charge for such element shall be computed by dividing the annual revenue requirement for such element by the sum of the projected premium access minutes for such element for such period and a number that is computed by multiplying the projected non-premium minutes for such element for such period by .45.

(d) The transitional non-premium charge or charges for the Transport element or elements shall be computed by multiplying the corresponding premium charge or charges by .45.

3. Section 69.207 is removed.

4. Section 69.305(b) of the rules is amended to read as follows:

69.305 Carrier OSP.

(a)

* * *

(b) Carrier OSP used for interexchange services that use switching facilities for origination and termination that are also used for local exchange telephone service shall be apportioned between the Dedicated Transport and Common Transport elements. Such OSP shall be assigned to the Dedicated Transport element if it is used exclusively for the interexchange services of a particular carrier.

* * * * *

5. Section 69.501(e) of the rules is revised to read as follows:

69.501 General

* * * * *

(e) Any portion of the Common Line element revenue requirement that is not assigned to Carrier Common Line elements pursuant to paragraphs (a), (b), (c) and (d) of this section shall be apportioned between End User Common Line and Carrier Common Line pursuant to § 69.502. Such portion of the Common Line element annual revenue requirement shall be described as the base factor portion for purposes of this Subpart.

6. Section 69.502 of the rules is revised in its entirety to read as follows:

69.502 Base factor allocation.

The projected revenues from the End User Common Line charges and Special Access surcharges shall be deducted from the base factor portion to determine the amount that is assigned to the Carrier Common Line element.

STATEMENT
OF
COMMISSIONER HENRY M. RIVERA
DISSENTING IN PART

RE: Third Reconsideration in Phase I of the Access Charge Proceeding, CC Docket No. 78-72.

I dissent from the portion of this decision which now abruptly reverses our *Second Reconsideration*'s flat-rate structure for non-premium OCC access and establishes usage-sensitive charges in its stead.

Over a year ago, we set down (finally, I thought) "firm" guidelines by which this industry would proceed during the post-Divestiture transition toward equal access. This decision reverses a significant aspect of our prior determination regarding the rate structure of non-premium access. Now, at this late date, the majority suggests that we abandon the already implemented flat-rate structure approach for a usage base structure.[1] To be sure, a usage approach is not without merit, as it was over a year ago when we considered and rejected such a structure in our *Second Reconsideration.*[2] However, the resulting uncertainty and possible dislocation injected into this already storm-tossed industry by such a change far outweigh any benefits which might be derived. This abrupt change in the ground rules upon which the industry has relied to plan its present course of operations is unwarranted.[3] Any efficiencies to be gained by a usage based rate structure are severely diminished by the wasted resources previously expended on strategies that now must be abandoned in favor of new courses "required" by the newly imposed ground rules. What makes this change all the more futile is the relatively short period of time remaining during which "problems" arising under the flat-rate structure (with the FX "loophole") would exist.

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[1] The majority attempts to cloak this decision as a "pro-competitive" step in favor of small OCC interexchange carriers whose average usage levels are substantially less than the 9,000 minutes we found to be a reasonable estimate of the current industry average on which we based the flat rate for non-premium access. However, as the Order recognizes at para. 12, rather than pleading harm or disadvantage, the OCCs, including the small, below-9,000 minute-carriers, that filed comments in this reconsideration round *all support* the flat-rate structure. The majority contradicts itself by suggesting that the flat-rate non-premium charge serves as a barrier to entry (para. 14), and, at the same time, conceding "recently, many smaller carriers have entered the market" (para. 13). Our Industry Analysis Division's information (and other data) confirms this fact and indicates that there are a large and rapidly growing number of firms providing interstate telephone service. In fact, in January the FCC published a list of some 250 carriers that had opted to file their interstate tariffs with the Commission. Many others are not on that list simply because they did not choose to file FCC tariffs for their services. The "plight" of small, below-9,000 minute-carriers that is apparently at the heart of the majority's concern is adequately addressed by the existence of an FX "loophole" which gives OCCs the option of obtaining usage-priced FX lines as an alternative to flat-rate FGA lines. Today's decision, at para. 18, clarifies that the FX "loophole" continues to be an alternative available to OCCs.

[2] While it is true that the *Second Reconsideration* envisioned a "proceeding" to be instituted in 1985 in order to determine whether a different *procedure* should be used to compute a non-premium charge, notwithstanding the majority's position at para. 9, it is

Today's decision is an example of poor regulatory management of an industry (already racked by tumultuous changes) through a transition from one era to another. This decision can lend no certainty to industry players by which to make and implement rational business planning. Nor can the financial community take any comfort in the instability created by an industry track record marked by such course changes imposed at the apparent whim of federal regulators.

Unfortunately, today's decision lends credence to critics who charge that this Commission is incapable of managing the telecommunications industry in transition.

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unreasonable to suggest that the Commission was contemplating that the question of *rate structure* would be the subject of such a "proceeding". Additionally, that "proceeding" should have been independent of today's *Third Reconsideration*. 97 FCC 2nd 834, 862 (1984).

[3] Admittedly, there have been other modifications to the established ground rules for OCC non-premium access charges. *See, e.g.*, n. 29. But none have been so late in surfacing. It is the untimeliness of today's reversal and the short period that it will be in place that I find so objectionable.

Common Carrier, International

Report and Order adopted setting forth the Commission's guidelines for the distribution of circuits among North Atlantic cable and satellite facilities during the 1986-1991 period.
—*N. Atlantic Telecommunications*
CC Docket No. 79-184

FCC 85-456

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In the Matter of Inquiry into the Policies to be Followed in the Authorization of Common Carrier Facilities to Meet North Atlantic Telecommunications Needs During the 1985-1995 Period	CC Docket No. 79-184

SECOND REPORT AND ORDER

Adopted: August 7, 1985; Released: August 22, 1985

BY THE COMMISSION:

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I. Introduction

1. On April 22, 1985, we released a Second Notice of Proposed Rulemaking (NPRM) in this proceeding setting forth our tentative conclusions regarding the loading of satellite and submarine cable facilities used for the provision of international services in the North Atlantic region during the 1986-1991 period.[1] In response to our NPRM, we have received comments from the American Telephone and Telegraph Company (AT&T), the Communications Satellite Corporation (Comsat), GTE Sprint Communications Corporation (GTE Sprint), Hawaiian Telephone Company (Hawaiian), ITT World Communications Inc. (ITTWC), MCI International, Inc. (MCII), RCA Global Communications, Inc. (RCAGC), Satellite Business Systems (SBS), The Western Union Telegraph Company (WUT), Fedex International Transmission Corporation (Fedex), the National Telecommunications and Information Administration (NTIA) and Aeronautical Radio, Inc. (ARINC).[2] Reply comments were filed by AT&T, Comsat, GTE Sprint and NTIA.

2. In this Report and Order we affirm, in part, the tentative conclusions presented in the NPRM regarding the loading of facilities used for the provision of international services in the North Atlantic region for the 1986-1991 period between the United States and the CEPT entities.[3]

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[1] Inquiry into the Policies to be followed in the Authorization of Common Carrier Facilities to Meet North Atlantic Telecommunication Needs During the 1985-1995 Period, FCC 85-176, ___ FCC ___ (1985). We had previously adopted a Notice of Inquiry on this matter as well. FCC 84-351, released August 3, 1984.

[2] ARINC is a joint venture of the U.S. air transport industry organized for the purpose of providing the communications requirements of its member airlines on a not-for-profit basis.

[3] CEPT is the Conference Europeenne des Administrations des Postes et des Telecommunications, an organization of the postal and telecommunications entities of 26 European nations. Because the provision of international services is a joint undertaking between sovereign states or their carriers, the development of loading guidelines for the 1986-1991 period has been the subject of much discussion in recent meetings of the North Atlantic Consultative Process. The reports of the Working Group (January, 1985) and Senior Level (May, 1985) meetings have been included in the docket, and the views and requirements of our foreign partners have been considered throughout this proceeding.

Specifically, we conclude that circuits used for the provision of international record services, circuits used by new entrants, and circuits used to provide message telephone service by all international carriers other than AT&T should not be subjected to circuit distribution guidelines or loading requirements. We further conclude that AT&T should be permitted, but not required, to increase the number of message telephone circuits it places on either cable or satellite facilities by 2 percent per year for three years (1986-1988). Prior to the end of this three year period we will review the loading question to determine what, if any, methodology should be utilized after 1988 in the North Atlantic region for circuits used by AT&T to provide IMTS. Below we: (a) summarize the Third Notice of Inquiry and the filings submitted therein; (b) describe the Second Notice of Proposed Rulemaking; (c) outline the comments and reply comments filed in response to the Second Notice of Proposed Rulemaking; and (d) present the views of CEPT entities. We thereafter analyze the record and reach the conclusions indicated above.

A. Third Notice of Inquiry

3. We initiated this proceeding on August 3, 1984 with the release of our Third Notice of Inquiry (NOI). We there noted that the circuit distribution guidelines currently in force for the North Atlantic region were developed in Docket No. 18875.[4] Under these guidelines, AT&T is generally required to distribute circuits used for the provision of U.S.-CEPT message telephone service in accordance with the balanced loading methodology.[5] Circuits used for the provision of U.S.-CEPT record services (*e.g.* leased-channel, telex, public message, Datel, etc.) are not subject to any distribution guidelines. Because the current guidelines extend only until the end of 1985, we indicated in the NOI that there was a need to develop circuit distribution guidelines for the post-1985 period at this time.

4. In our NOI we identified essentially three policy options we could follow in fashioning circuit distribution guidelines for the 1986-1991 period and requested interested persons to comment on these options. The first such option was to continue to use the balanced loading methodology

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[4] *See* Future Licensing of Overseas Communications Facilities, 73 FCC 2d 326 (1979). *See also* Overseas Communications, 71 FCC 2d 71 (1979).

[5] The balanced routing (or balanced loading) methodology distributes circuits among facilities with unused capacity in a manner which, to the extent possible, seeks to place equal numbers of circuits on all transmission systems between the United States and a given country. When one cable or satellite transmission system reaches the limit of its capacity, it falls out of the loading pattern and subsequent growth traffic is equally distributed among the remaining facilities with unused capacity. When a new satellite or cable facility is introduced into service, all additional growth circuits are placed on that facility until it carries as many circuits as the other balanced systems.

as the basis for circuit distribution guidelines. The second option identified was to remove ourselves immediately from circuit distribution decisions, leaving the matter entirely to the discretion of the U.S. carriers and their CEPT correspondents. The third option we identified was to develop new circuit distribution guidelines based on a methodology which would increase carrier flexibility and discretion and reduce Commission involvement in loading decisions, but which would allow us to retain sufficient authority to assure that user interests were protected.

5. In response to the NOI pleadings were submitted by AT&T, Comsat, GTE Service Corporation (on behalf of Hawaiian), GTE Sprint, ITTWC, RCAGC, TRT Telecommunications Corporation, NTIA, ARINC and SBS. These parties generally favored continuing the exemption from loading guidelines for suppliers of record services, new entrants and suppliers of international message toll service other than AT&T. As to a methodology for AT&T's international message telephone service (IMTS), Comsat argued in favor of continuing a balanced loading approach, AT&T argued in favor of a more flexible approach which would permit it to place approximately 85 percent of all traffic growth on cable, and most other carriers advocated a middle course: moving away from balanced loading and permitting AT&T some additional flexibility.[6]

B. Second Notice of Proposed Rulemaking

6. In the NPRM we stated that it is our goal to rely on market forces to establish the optimal mix of services, rates and facilities. We also stated that market forces could be employed to encourage the efficient use of existing facilities and the development and deployment of the most efficient facilities in the future. We recognized, however, that the market

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[6] AT&T's approach would permit it to load traffic growth on cable in a manner to increase total traffic carried on cable facilities by three percent per year for four years. At the end of the four year period, Commission involvement in loading decisions would terminate. In comparison to AT&T's approach, the other proposals, except for Comsat's request to retain balanced loading and NTIA's proposal to implement a cost based methodology derived from comparing cable and satellite revenue requirements, generally called for a lower percentage of total traffic being routed over cable facilities and a longer period of Commission oversight. The basis for these phase-in proposals by the other interested parties is their concern over the availability of cable circuits for their use and the level of satellite usage charges if AT&T could freely load its traffic on cable facilities.

In a joint submission to the January 8-11, 1985 meeting of the North Atlantic Consultative Working Group, AT&T and Comsat proposed a more broadly stated version of the AT&T circuit distribution proposal. They proposed that AT&T be permitted, but not required, to increase the number of U.S.-CEPT message telephone circuits it places on either cable or satellite facilities by an agreed-to percent per year up to placing a maximum of 60 percent of such circuits on either transmission medium. Neither the annual percentage increase which should be allowed nor the period of years over which such guidelines should extend were addressed in the joint submission.

is not now sufficiently competitive and that certain facility biases presently exist. We therefore tentatively concluded that it would not serve the public interest to remove ourselves immediately from circuit distribution decisions with respect to all circuits.

7. In the NPRM we indicated that the three loading methodologies identified in the Notice of Inquiry — balanced loading, immediate removal and increased flexibility — could be considered for the four types of circuit use — record services, record or voice services provided by new entrants, voice services provided by all carriers other than AT&T and IMTS provided by AT&T. In considering these methodologies for these circuit uses we indicated that where a market mechanism existed or where the relative number of circuits involved was not great our inclination would be to give carriers absolute flexibility and not to impose any loading requirements. Of course, where market forces would not act to produce the most efficient mix and use of facilities, we would prescribe guidelines. We indicated our particular concern that AT&T's preference for cables, as a cable equipment manufacturer and rate base regulated carrier, could lead that carrier to employ cable facilities even if satellite facilities were more cost effective. We also estimated the impact on Comsat and INTELSAT of each loading proposal (employing an IMTS traffic forecast supplied by AT&T),[7] analyzed the market and reached certain tentative conclusions.

8. *Record Services.* With respect to circuits used for the provision of U.S.-CEPT record services, we tentatively concluded in our NPRM that such circuits should continue to be exempted from the imposition of any circuit distribution guidelines.[8] First, we noted that the number of circuits used for record services on North Atlantic routes was relatively small[9] and, thus, could have little effect on the overall use of cable and satellite facilities. Second, we indicated that approximately 87 percent of the circuits used for record services are used to provide leased channel service and that leased channel customers often have a specific need for and the ability to designate either a cable or satellite circuit. Third, we noted that

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[7] We compared in our NPRM the revenues which Comsat and INTELSAT would receive under the various proposed guidelines. We calculated revenues for the six year planning period employing balanced loading as well as guidelines permitting annual increases of 2, 2.5 and 3 percent in the number of circuits AT&T could place on cable circuits with a maximum limit of placing 60 percent of such circuits on cable facilities. We also calculated revenues employing AT&T's proposal.

[8] In 1979 we found in Docket 18875 that circuits used for the provision of U.S.-CEPT record services should be exempted from circuit distribution guidelines. *See* Policies for Overseas Communications Facilities, 73 FCC 2d 326 (1979) and Overseas Communications, 71 FCC 2d 71 (1979).

[9] At year-end 1984, of the approximately 14,617 voice circuits used to provide U.S.-CEPT communications services, only approximately 1,652 circuits were used for the provision of record services.

leased channels and switched record services are offered by multiple record carriers, none of which appeared to have a dominant market share. We therefore tentatively concluded that there continued to be a viable marketplace mechanism for the distribution of circuits used for leased channels and switched record services between cable and satellite facilities. We also observed that this marketplace mechanism would be strengthened by recent events such as the advent of INTELSAT Business Services and our recent decisions permitting competitive earth station services and allowing Comsat to provide INTELSAT space segment capacity directly to users.

9. We specifically stated that our tentative conclusion to continue to exempt circuits used to provide U.S.-CEPT record services from circuit distribution guidelines was intended to apply to all such circuits, including those used by AT&T for such services. We stated that leased channels provided by AT&T are subject to the same marketplace distribution mechanism as those of the other carriers providing that service. In addition, we noted that at year end 1984, AT&T provided only 90 (6.2 percent) of the approximately 1442 voice grade leased channels in service between the U.S. and CEPT countries. In view of these factors, we found no reason for imposing greater restrictions upon AT&T's distribution of circuits used to provide leased channels than upon such circuits of the other carriers.

10. *New Entrants.* We also tentatively concluded that the exemption from distribution guidelines should be extended to circuits used by new entrants for the provision of any service and to circuits used for the provision of IMTS by all carriers other than AT&T. We noted with respect to circuits used for record services by new entrants that such circuits would be subject to the same marketplace distribution mechanism as the circuits used by existing carriers for the provision of those services. Further, new entrants would, at least initially, account for a relatively small portion of the total number of circuits used for the provision of record services and, consequently, would have little effect on the overall use of cable and satellite transmission mediums.

11. We indicated that although new entrants into the IMTS market such as MCII and GTE Sprint could be expected to use more circuits than new entrants which provide only record services, new entrants into the IMTS market are likely to use a considerably smaller number of circuits for the provision of that service than AT&T. We also noted that competitors to AT&T would have a substantial incentive to efficiently route their traffic and that loading flexibility could assist their ability to acquire operating agreements. Thus, we tentatively concluded that exempting circuits used by new entrants providing U.S.-CEPT message telephone service would have a relatively small effect on the overall use of

cable and satellite transmission facilities. Similarly, we tentatively concluded that the comparatively few circuits used by existing providers of U.S.-CEPT message telephone service other than AT&T, such as entities with regional monopolies like the Hawaiian Telephone Company, made it unlikely that exempting those circuits from distribution guidelines would have a significant effect on the distribution of circuits between the cable and satellite transmission mediums.

12. *AT&T's IMTS Circuits.* As to AT&T's loading of IMTS circuits, we noted AT&T's position in the market, the large number of circuits used for that service, the entry only recently of competitive carriers into this market, AT&T's preference for cable facilities and the short period of time that Comsat has been free to enter this market, and tentatively concluded that this market is not yet sufficiently competitive to permit us to withdraw immediately from decisions pertaining to the distribution of AT&T's U.S.-CEPT message telephone service circuits. We observed that, as of year-end 1984, 12,965 or 88.7 percent of the 14,617 circuits in use for U.S.-CEPT services were used for the provision of message telephone service. Of these 12,965 circuits used to provide message telephone service, 12,944 or 99.8 percent were used by AT&T. We noted that since users of message telephone service do not have the ability to select whether their calls will be routed by cable or satellite, AT&T's distribution of its message telephone circuits in large measure determines the relative use of cable and satellite circuit facilities.

13. In addressing the guidelines which should be applied to AT&T's U.S.-CEPT message telephone circuits for the 1986-1991 period, we considered several options: (a) continuing balanced loading; (b) adopting a revenue requirement comparison methodology proposed by NTIA; (c) adopting a multi-tier scheme which would permit AT&T greater flexibility as its competitors acquired IMTS operating agreements; and (d) adopting guidelines which would permit AT&T an annual increase in loading flexibility. We tentatively concluded that the balanced loading methodology should not continue to be used as the basis for such guidelines. We recognized that the balanced loading methodology continued to offer service reliability advantages. However, we felt that use of that methodology would not provide appropriate incentives to stimulate increased competition in the provision of U.S.-CEPT message telephone service and for AT&T, Comsat and INTELSAT to build and operate efficient, low-cost facilities.

14. We also tentatively concluded that a proposal submitted by NTIA to distribute AT&T's message telephone circuits in inverse proportion to the annual revenue requirements for the cable and satellite transmission mediums was not sufficiently well defined to permit its adoption as the basis for 1986-1991 guidelines at this time. We requested further

definition of and comments on the NTIA proposal and indicated that we were not precluding its eventual adoption.

15. We also considered, but did not propose to adopt, a multi-tiered circuit distribution methodology which would more directly relate relaxation of facilities loading guidelines to the entry of multiple providers of message telephone service into the market on a country-by-country basis. While not desiring to impose unilaterally a loading approach, we recognized that such a methodology would provide a clear incentive for foreign administrations to enter into operating agreements with additional IMTS providers. We also recognized that the acquisition of operating agreements and the development of competition was an important long term objective of the Commission. In order to stimulate comments and facilitate analysis, we requested interested parties to comment on a two-tiered methodology under which AT&T would be permitted to increase its loading flexibility on either cable or satellite facilities by 1 per cent per year to all CEPT countries. This would constitute the first tier. In the second tier, AT&T would be permitted to increase its loading flexibility on either cable or satellite facilities by 3 per cent per year to countries where multiple providers of message telephone service had obtained operating agreements and competition in the provision of that service was developing. Under this scenario, no upper limit would be imposed on the flexibility which could be attained in the second tier.

16. We tentatively concluded that AT&T's proposed guidelines which contemplated our removal from circuit distribution decisions at the end of 1989 would not provide a transitional period of sufficient length to offset existing biases or to permit the development of a marketplace mechanism for the cost-effective distribution of its U.S.-CEPT message telephone circuits. We also expressed our concern that the fact that only 15 percent of the expected growth circuits would be placed on satellite facilities during the 1986-1991 period under AT&T's proposed guidelines could place undue upward pressure on Comsat's and INTELSAT's rates which could inhibit the development of intermodal competition between the cable and satellite transmission mediums.[10]

17. We noted the lead times required for major facility procurements and indicated that satellite transmission facilities which will be used for North Atlantic services during the 1986-1991 period are already in service

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[10] Assuming constant Comsat and INTELSAT rates, our analysis indicated that adoption of the AT&T proposed guidelines would result in Comsat and INTELSAT receiving approximately $218.2 million and $160.6 million less revenue, respectively, during the 1986-1991 period than they would receive if the balanced loading methodology was continued as the basis for circuit distribution guidelines during that period. Our analysis also disclosed that adoption of AT&T's proposed guidelines would result in 21,113 or 85.0 percent of the 24,853 growth circuits projected to be required during the 1986-1991 period being placed on cable facilities.

or have been procured under binding contracts. Consequently, INTELSAT's capital costs for these facilities are relatively fixed and its ability to plan future facility capacity to respond to AT&T's loading proposal was limited. We also noted that the carriers had reduced their forecast of the circuits required in 1990 by approximately 26 percent from the level they forecast in 1980 (the forecast on which we relied in developing our guidelines for the TAT-8 cable and the INTELSAT VI satellites) and that recent technological developments may significantly increase the capacity of both the TAT-8 cable and the INTELSAT satellites. As a result of these factors, we felt that AT&T's proposed guidelines, by placing only 15 percent of growth circuits on satellite facilities, would place a disproportionate share of the burden of excess capacity on INTELSAT and inhibit the development of intermodal competition.

18. After reviewing various phase-in proposals which would give AT&T additional flexibility, and balancing a desire to spur intermodal competition, to promote the efficient use of facilities and to respond to the preferences of our foreign counterparts with the realities of the marketplace and our obligations to INTELSAT, we tentatively concluded that during the 1986-1991 period AT&T should be permitted an annual 2 percent increase in the number of U.S.-CEPT message telephone circuits it can place on either cable or satellite facilities up to placing a maximum of 60 percent of such circuits on either transmission medium. We calculated, using the most recent traffic forecast and existing rates, that this approach would allow AT&T to place approximately 67.2 percent of its growth circuits on cable facilities during the 1986-1991 period and would reduce Comsat's and INTELSAT's revenues by approximately $90.1 million and $66.3 million, respectively, from the level which could be expected if we continued to use the balanced loading methodology as the basis for circuit distribution guidelines. We tentatively concluded that this reduction in revenues would not place undue upward pressure on Comsat and INTELSAT rates but would provide a strong incentive for Comsat to enter the U.S.-CEPT message telephone market, to compete vigorously for IMTS traffic and to spur INTELSAT to greater construction and operational efficiencies. We also felt that these guidelines should permit AT&T sufficient flexibility and substantially respond to the desires of the CEPT administrations.

C. Comments and Reply Comments

19. *Guidelines for Record Circuits, Circuits Used by New Entrants for All U.S.-CEPT Services, and Circuits Used for U.S.-CEPT Message Telephone Service by All Carriers Other Than AT&T.* With the exception of ITTWC and WUT, all of those filing comments support our tentative conclusion not to apply loading restrictions to circuits used to provide U.S.-CEPT record services. No one opposes extending that policy

to circuits used by new entrants for either record services or message telephone service and to all existing providers of U.S.-CEPT message telephone service other than AT&T. The commenting parties generally agree with our analysis that providers of record services, new entrants and IMTS providers other than AT&T employ relatively few circuits and, thus, will not significantly affect overall use of cable and satellite facilities. A number of the parties also note the competitiveness of the record services market and indicate that many leased channel customers request specifically either cable or satellite circuits and have the ability to choose between the two transmission mediums to satisfy their particular leased channel needs.

20. ITTWC and WUT disagree with our tentative conclusion not to prescribe a distribution methodology for record circuits only to the extent that we would extend the exemption to AT&T's record circuits. These two carriers argue that although AT&T now has a small share of the record services market, it has the power to increase that share through offering service at significantly lower rates than other providers, subsidized by its message telephone service revenues. WUT notes that AT&T has substantial idle cable capacity and will have more once TAT-8 is introduced, thus giving AT&T the incentive to increase its record services market share through unfair pricing actions as a way to use cable circuits. WUT is also concerned that AT&T could use up its remaining TAT-7 circuits, thus depriving others, including its competitors, of access to cable circuits until TAT-8 is introduced.

21. ITTWC expresses its concern that AT&T will base its rates for competitive, leased channel service only on new cable facilities which have lower per circuit costs while allocating older cable facilities with higher per circuits cost to non-competitive message telephone service. ITTWC indicates that such a manipulation of costs would permit AT&T to unfairly price its leased channel service below that of its competitors who are employing circuits from all cables and do not have the ability to place competitive services on new (cheaper) facilities and a monopoly service (IMTS) on older (more expensive) facilities. ITTWC asserts that AT&T has already followed such a pattern for U.S. Mainland-Hawaii and U.S.-CEPT leased channel circuits. ITTWC therefore suggests that the Commission require AT&T to segregate its facilities and costs on a country and facility basis into two discrete categories (message telephone service and non-message telephone service), which contain an appropriate mix of new and old capacity. In response, AT&T stated that circuits would be made available to other carriers and indicated that the remaining points were tariff rather than loading issues.

22. *AT&T U.S.-CEPT Message Telephone Circuits.* None of the comments to our NPRM, like those to the NOI, advocated that we should

remove ourselves immediately from decisions affecting the distribution of AT&T's U.S.-CEPT IMTS circuits. However, there is a wide range of views as to the methodology which should be used for those circuits for the 1986-1991 period. MCII, SBS, WUT and ARINC support our tentative conclusion to permit AT&T to increase the number of circuits it places on either cable or satellite facilities by 2 per cent per year for six years up to a limit of placing 60 per cent of its U.S.-CEPT message telephone circuits on either transmission medium.[11] NTIA supports use of this methodology for only two years as a transition mechanism to its methodology which would distribute such circuits in inverse proportion to the annual per circuit revenue requirements for cable and satellite facilities.[12] RCAGC requests us to employ an equitable loading methodology for AT&T during the 1986-1991 period because of AT&T's dominance in the message telephone service market. While not proposing a specific guideline, we note that in response to the NOI RCAGC indicated that equitable loading was not necessarily the same as balanced loading.

23. Comsat, GTE Sprint, ARINC, ITTWC, MCII, RCAGC, SBS and WUT all note AT&T's dominance of the U.S.-CEPT message telephone market and AT&T's position as user of approximately 90% of all North Atlantic circuitry. In the face of such dominance, these entities argue that one cannot now reasonably characterize the U.S.-CEPT message telephone market as competitive.[13] They also state that permitting AT&T

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[11] MCII states that the 2 percent methodology provides AT&T with a considerable measure of increased flexibility and strikes a "reasoned and pragmatic balance." SBS finds the 2 percent methodology to be a "fair compromise." WUT views our proposal as an "appropriate balance" between permitting greater flexibility and protecting other carriers. ARINC characterizes the 2 percent proposal as an excellent first step.

[12] NTIA asserts that the two percent guidelines for which we have expressed a tentative preference do not provide sufficient competitive incentives for the long term. It argues that unless a circuit distribution method is implemented which ensures that additional traffic is directed to the more cost effective facility, the party providing the lowest cost circuits will not necessarily be the one to gain market share. NTIA contends that, under the two percent guideline, a party with high cost circuits is still guaranteed 40 percent of the market and, therefore, may have little incentive to lower costs or rates. Moreover, if the market should not be sufficiently competitive by year-end 1991 to permit our withdrawal from circuit distribution decisions, in NTIA's view, adoption of our tentatively preferred guidelines would simply exchange one arbitrary methodology for an equally arbitrary 60/40 allocation.

[13] Comsat emphasizes that it is now preparing to enter the U.S.-CEPT message telephone market and asserts that it intends to become an important competitor. However, it argues that because it has no operating agreements and must start with a customer base of zero,it is unlikely to attract a large enough market share in the next few years to replace the circuits AT&T would divert to cable under its proposed 3 percent methodology. Comsat also urges that we bear in mind that our *Authorized User III* decision, which permits Comsat's entry into the message telephone service market, remains under the cloud of pending court proceedings.

total loading flexibility would adversely affect the supply of cable circuits and lead to unreasonable increases in satellite rates.

24. Comsat argues that the current balanced loading methodology remains the best loading criterion, giving service reliability benefits and apportioning the risk of excess capacity evenly, and asks that we reverse our tentative conclusion not to rely upon it. Failing that, however, Comsat states that the proposed 2 per cent guideline represent a "judicious compromise" which will apportion the risk of excess capacity more evenly among Comsat/INTELSAT and AT&T, while assuring that Comsat and INTELSAT are not severely adversely affected.

25. Comsat also reminds us that our calculation under the two percent guideline which indicated that Comsat would receive at least 33% of the growth traffic is valid only if AT&T's U.S.-CEPT message telephone circuits grow at the 17.3 per cent annual rate forecasted by AT&T. Comsat states that during the 1980-1984 period, AT&T's actual North Atlantic circuit growth rate achieved 17.3 per cent only in 1981. Growth rates for 1982, 1983 and 1984 were 8.9, 8.3 and 16.4 per cent, respectively. Should AT&T achieve only a 10 per cent growth of U.S.-CEPT message telephone circuits during the 1986-1991 period, Comsat calculates that the 2 per cent circuit distribution guidelines would result in 75 per cent of those circuits being placed on cable facilities (and the three per cent guidelines would place 91 per cent of these circuits on cable facilities). Comsat asserts that these results may not be reasonable.

26. AT&T supports adoption of its proposal to phase-in increased flexibility at a rate of 3 per cent per year over four years (1986-1989) with total deregulation of loading thereafter. AT&T opposes the two per cent methodology because it believes that methodology does not give it enough flexibility and, by continuing to promise Comsat a substantial share of traffic, does not give Comsat the proper incentive to compete for IMTS traffic.

27. AT&T also asserts that the U.S.-CEPT message telephone market is already significantly competitive, noting that MCI operates or has operating agreements with a number of European countries, which account for more than 50 per cent of U.S.-CEPT message telephone market. AT&T also notes that MCI has recently filed an application requesting authority to lease by 1987 more than 2000 satellite circuits and states that MCI has repeatedly predicted that it will serve more than 80 per cent of the international direct dial market by the end of this year. AT&T further states that GTE Sprint is providing message telephone service to the United Kingdom and has announced it will provide such service with France and Spain. Given these factors, AT&T asserts that there is no need to deny the flexibility it seeks through adoption of its proposed 3 per cent guidelines.

28. AT&T also contends that the analysis used in our NPRM significantly overstates the effect of AT&T's proposal on Comsat's revenues. AT&T asserts that its proposal will not reduce the existing revenues of either Comsat or INTELSAT. To the contrary, according to AT&T, their revenues will be increased as AT&T proposes to increase its satellite circuit use throughout the 1986-1991 period.[14] AT&T argues that a four year, 3 per cent transition plan with a 60 per cent cap is a moderate, manageable adjustment in facilities utilization. AT&T states that its proposed guidelines are more likely to provide increased competition between cable and satellite facilities "..thereby for the first time introducing a measure of marketplace discipline on INTELSAT's construction and use of satellite facilities which is long overdue."

29. Finally, AT&T states that we should not prescribe any circuit distribution guidelines which extend beyond 1989. AT&T believes that the entire international marketplace will be transformed by that time by the introduction of the TAT-8 optical fiber cable system, an increasing number of new digital services, the possible introduction of non-carrier facilities by Tel-Optik Limited, Orion Satellite Corporation and other entities, and by increased competition in the provision of U.S.-CEPT message telephone service. These factors, together with the growing competition in the U.S. domestic telecommunications market, suggest to AT&T an environment which is far too volatile and unpredictable for the Commission to undertake the prescription of long range circuit distribution guidelines. Thus, while AT&T continues to believe the international marketplace will justify the removal of all loading restrictions at year-end 1989 and urges adoption of its 3 per cent proposal, it suggests adoption of any methodology only through 1989. AT&T states that if at the end of 1989 we are not satisfied that marketplace conditions then warrant our complete forbearance from circuit distribution decisions, we could adopt further transitional steps such as maintaining a 60 per cent limitation on the loading of either cable or satellite facilities for 1990 and 1991.

30. *The NTIA Proposal*. NTIA advocates, as it did in response to the NOI, the adoption of a loading methodology which would distribute AT&T's U.S.-CEPT message telephone circuits between the cable and satellite transmission mediums in inverse proportion to the annual per circuit revenue requirements for each of these transmission mediums. NTIA states that its proposal will promote intermodal (cable/satellite) competition by allocating to the more efficient medium a greater traffic share. By rewarding efficiency (or a willingness by AT&T or Comsat to

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[14] While AT&T does state that total satellite circuits used would increase and that total revenues flowing to INTELSAT and Comsat would increase, it does not express a view on the impact of its proposal on either entity's rates or revenue requirement per circuit used.

accept a lower revenue requirement) NTIA anticipates lower rates for users, the introduction of new services and technologies, the retirement of inefficient facilities and lower operational costs. NTIA recognizes, however, that a number of aspects of its proposal have yet to be defined and developed. While it believes that its proposal can be successfully developed, it recognizes that this process will be difficult and require time. Therefore, as indicated above, NTIA suggests that we adopt our tentatively preferred 2 per cent guidelines for a two year transitional period during which work on the NTIA proposal can be completed, thus allowing it to be used as the basis for circuit distribution guidelines after 1987.

31. In response to concerns raised relating to acceptance of its proposal by foreign administrations, NTIA states that the circuit distribution preferences of the carriers' foreign correspondents must be accommodated to a reasonable degree. It believes that its proposed methodology can be constructed to take into account the operational (*i.e.* diversity, redundancy, service quality and restoration) concerns of the foreign administrations.

32. Most of the parties, including AT&T and Comsat, oppose the NTIA proposal. They argue that it is likely to be controversial and operationally unsound, require unending Commission regulatory oversight, delay development of a marketplace mechanism, and complicate the facilities planning process. These respondents also note that the development of the regional cable and satellite revenue requirements on which the NTIA proposal depends will be difficult and the results uncertain.[15]

33. *The Multi-Tiered Circuit Distribution Proposal.* Of the parties commenting on the two-tiered circuit distribution methodology on which we requested comments, only GTE Sprint and ITTWC viewed that methodology favorably. GTE Sprint believes that adoption of a multi-tiered circuit distribution methodology would further our goal of increasing competition in the provision of international message telephone service by giving foreign telecommunications entities an incentive to enter into operating agreements with GTE Sprint and other U.S. voice carriers.

34. GTE Sprint proposes that we adopt a multi-tiered methodology which would permit AT&T to increase the number of circuits it places on either cable or satellite facilities by 2 per cent per year, with an upper limit of 60 per cent, to those countries which enter into additional operating

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[15] Comsat in particular opposes NTIA's methodology which it views as deficient for not taking into account excess satellite capacity employed by all carriers for restoration purposes, for ignoring significant transiting costs incurred by users of cable circuits, and for requiring the disclosure of Comsat's prices but not those of its competitors.

agreements with AT&T's major competitors for IMTS.[16] For circuits AT&T uses to provide message telephone service to countries which do not enter into operating agreements with AT&T's major IMTS competitors, AT&T would be permitted to increase the number of such circuits it places on either cable or satellite facilities by 1 per cent per year. GTE Sprint further asserts that circuits used by AT&T for the provision of 800 Service-Overseas should be subjected to the circuit distribution guidelines adopted for IMTS. GTE Sprint states that demand for this AT&T service is growing and it expects it to become an important segment of AT&T's switched voice service.

35. ITTWC states it believes the multi-tiered circuit distribution methodology may have merit for IMTS circuits. It states that the flexibility (upper limit) allowed for message telephone circuits to countries with small traffic volumes should not exceed 3 per cent per year while the flexibility (upper limit) for such circuits used to countries with large traffic volumes should not exceed 2 per cent per year. ITTWC advocates that the degree of market penetration by new entrants be used as the trigger mechanism for permitting AT&T the greater degree of flexibility in its distribution of message telephone circuits.

36. AT&T characterizes the two-tier methodology as "unworkable" and likely to lead to unfair consequences, particularly to countries whose traffic volumes are small and which have less incentive to deal with multiple U.S. carriers. AT&T further argues that this methodology would be inconsistent with the spirit of cooperation and comity which now marks international communications and the facilities planning process. AT&T further states that this proposal could be counterproductive by hardening opposition to competition within CEPT.

37. Comsat also opposes adoption of the two-tier methodology because, in its view, Comsat would bear the total burden of new entrants obtaining operating agreements. In short, the new entrants would not be subject to loading requirements and AT&T would be permitted to increase the number of its message telephone circuits to those countries it places on cable. Comsat also argues that the two-tier methodology suffers from severe definitional problems such as determining how many agreements or the degree of competition which would trigger greater flexibility for AT&T. Comsat states that resolving these questions is likely to be controversial and require significant Commission regulatory oversight. Comsat also argues that the objective of having multiple providers of message telephone service obtain operating agreements raises foreign policy issues which should not be mixed with circuit distribution issues.

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[16] GTE Sprint asserts that, currently, itself and MCI must be considered as such major competitors. It notes that we could also adopt standards for designating other carriers as major competitors.

38. MCII, as well as Comsat, stresses that the existence of multiple suppliers in a particular market does not necessarily equate to effective competition and that it is the latter result which is important. MCII does not believe that adoption of a multi-tier circuit distribution proposal will hasten competitive entity, an objective it believes should be resolved by negotiation between the involved U.S. carrier and its potential overseas correspondent.

D. The CEPT View

39. We indicated in the NPRM the view of the CEPT entities expressed at the January 8-11, 1985 meeting of the North Atlantic Consultative Working Group that circuit distribution decisions should be left solely to the telecommunications entities which have invested in the cable and satellite facilities used to provide service. The CEPT entities indicated they oppose the use of any rigid distribution formulas and support a flexible circuit distribution methodology based entirely upon bilateral discussions between correspondent pairs.

40. The Summary Report of the Senior Level meeting of the North Atlantic Consultative Process held on May 21-22, 1985 indicates that CEPT is not satisfied with the tentative conclusions set forth in our NPRM. However, the CEPT representatives did emphasize that a move away from balanced loading was a step in the right direction. In CEPT's view, a better compromise could be to increase the 2 per cent annual increase in AT&T's flexibility to distribute its U.S.-CEPT message telephone circuits and to shorten the period of application of our tentatively preferred guidelines. The CEPT entities stated that they have an interest in both the cable and satellite transmission mediums but that for heavy traffic routes it may become more economic to use optical fiber submarine cables rather than satellites.

II. Discussion

41. Upon review of the record in this proceeding, we conclude that the guidelines for U.S. carrier distribution of circuits among available North Atlantic facilities during the 1986-1991 period should be as follows:

a. No circuit distribution guidelines are imposed on circuits used for the provision of U.S.-CEPT record services by any U.S. carrier, including AT&T;

b. No circuit distribution guidelines are imposed on circuits used to provide any U.S.-CEPT service, including message telephone service, by any new entrant;

c. No circuit distribution guidelines are imposed on circuits used for the provision of U.S.-CEPT message telephone service by any U.S. carrier, other than AT&T;

d. Using the cable/satellite distribution of AT&T's U.S.-CEPT message telephone circuits existing at year-end 1985 as a base, AT&T shall be permitted, but not required, during the 1986-1988 period to increase, without de-loading either transmission medium, the number of its U.S.-CEPT message telephone and 800 service-overseas circuits it places on either cable or satellite facilities by 2 per cent per year;

e. AT&T shall observe the 2 per cent annual cumulative limitation for the CEPT countries as a whole and need not observe this limitation on a country-by-country basis;

f. The Commission will review, prior to year-end 1988, the loading guidelines prescribed here for circuits used by AT&T to provide IMTS to determine what, if any, methodology should be utilized after 1988; and

g. The Commission retains jurisdiction to re-evaluate these guidelines, either on its own motion or on the request of an interested party, at any time during the 1986-1991 period should changes in marketplace conditions or other factors warrant such re-examination.

A. Circuits Used for U.S.-CEPT Record Services

42. We here affirm the tentative conclusion we reached in our NPRM that circuits used for the provision of U.S.-CEPT record services should continue to be exempted from the imposition of circuit distribution guidelines. As set forth in our description of responses to the NPRM, none of the responding parties objected to this tentative conclusion, except for its application to AT&T. As we noted in our NPRM, voice circuits used for the provision of U.S.-CEPT record services comprise less than 12 percent of the total number of voice circuits used for the provision of U.S.-CEPT telecommunications services at the end of 1984. Thus, the distribution of U.S.-CEPT record circuits can have little effect on the overall use of North Atlantic cable and satellite facilities.

43. In addition, approximately 87 percent of the voice circuits used to provide U.S.-CEPT record service are used to provide leased channels. Customers for leased channels often specify use of either a cable or satellite circuit to best satisfy their specific leased channel requirement. Those customers have the ability to select from among multiple carriers and to select between transmission mediums to satisfy their needs. Customers utilizing switched record services also have the ability to select from among multiple suppliers those services. Thus, for both switched record services and leased channels, there continues to be a viable marketplace mechanism for the distribution of record circuits between the cable and satellite transmission mediums.[17]

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[17] As we noted in our NPRM, this marketplace circuit distribution mechanism will be further enhanced by several recent events. These include the introduction of INTELSAT Business Service (IBS) which will provide users with an additional choice of service and may increase competition in the international leased channel market. In addition, because we have authorized a number of entities to provide IBS and many of these entities have no ownership interest in cable facilities, IBS may introduce additional price competition between cable and satellite facilities. Price competition should also be stimulated by our decision in *Earth Station Ownership* to allow competitive earth station services and our

44. We also adopt our tentative conclusion that circuits used by AT&T for the provision of U.S.-CEPT record services should be exempted from circuit distribution guidelines. Neither WUT nor ITTWC — the parties who questioned this tentative conclusion due to circuit availability and predatory pricing concerns — takes issue with our NPRM findings that AT&T has only a small per cent of the leased channel market and that AT&T's provision of leased channels is subject to the same marketplace distribution mechanisms as that of other carriers. Further, with respect to the potential that AT&T will use the exemption of its record circuits from loading restrictions as a means to exhaust its spare TAT-7 capacity and deny circuits in that cable to other carriers, we note that in our decision authorizing the U.S. carriers to participate in the construction and operation of the TAT-7 cable we retained jurisdiction to reallocate circuits in that cable as the public interest may require.[18] We also find that WUT's and ITTWC's concerns over the potential for AT&T to engage in improper pricing of record services are more appropriately raised in the relevant tariff proceedings and in our recently initiated International Competitive Carrier docket.[19] Imposition of restrictions on the distribution of AT&T's record circuits would be neither a fully effective method for preventing possible AT&T tariff abuses nor provide a useful mechanism for correcting any such abuse which might occur.

B. Circuits Used by New Entrants to Provide All U.S.-CEPT Services, Including Message Telephone Service

45. We find that we should adopt, as a part of our North Atlantic Region circuit distribution guidelines for the 1986-1991 period, our tentative conclusion that circuits used by new entrants for the provision of all U.S.-CEPT services, including message telephone service, should be exempted from circuit distribution guidelines. As we noted in our NPRM,

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decision in *Authorized User II* to allow Comsat to provide space segment directly to users and to enter the end-to-end market through a separate subsidiary.

[18] *See* AT&T Co., 73 FCC 2d 248, 268 (1979). We also specifically conditioned this authorization to require AT&T to:

> (1) . . . make available at the request of the Commission, interests in TAT-7 circuits to present and future carriers who secure operating agreements with foreign telecommunications entities which call for the use of such facilities; and
>
> (2) . . . make available at the request of the Commission, half interests in circuits to non-CEPT points to the U.S. international record carriers should they require such circuits to fulfill requests for all cable routings to such points.

We believe these provisions are adequate to assure the availability of TAT-7 circuits to other U.S. carriers and need not be supplemented by placing restrictions on the distribution of AT&T's circuits used for the provision of U.S.-CEPT record services.

[19] International Competitive Carrier Policies, CC Docket No. 85-107, Notice of Proposed Rulemaking, FCC 85-177, (released April 19, 1985).

customers for some record services have the ability to choose either satellite or cable facilities and circuits used by new entrants to provide record services will be subject to the same marketplace distribution mechanism as the record services of the existing carriers. Moreover, since the distribution of the relatively small number of circuits currently used to provide record services has little effect on overall cable/satellite use, the few circuits new providers of those services are likely to use initially will have an even smaller effect on such overall use.

46. New entrants providing U.S.-CEPT message telephone service can be expected to use more circuits than new providers of record services. Nevertheless, it is likely that the new IMTS providers will initially use few circuits compared to the number used by AT&T for that service. Thus, these new entrants are also likely to have little effect on the overall use of cable and satellite facilities in the North Atlantic Region. We also noted in our NPRM that the initial use of relatively few circuits by new message telephone service providers may require that they have greater flexibility in choosing their transmission facilities in order to permit them to handle technical considerations such as avoiding double satellite hops. We believe that this exemption may facilitate, within limits, the acquisition of operating agreements (if foreign correspondents have facility preferences) and promote the development of competition in the provision of IMTS. In view of the foregoing, and noting that none of the parties responding to our NPRM espoused a contrary view, we find that no circuit distribution guidelines should be imposed on circuits used by new entrants for any U.S.-CEPT service, including message telephone service.

C. Circuits Used for the Provision of U.S.-CEPT Message Telephone Service By All Carriers Other than AT&T

47. None of the respondents to our NPRM advocated that U.S.-CEPT message telephone circuits of carriers other than AT&T be subjected to loading restrictions. As of year-end 1984, only a small number of circuits were used to provide that service by any carrier other than AT&T. Consequently, the distribution of these other carriers' U.S.-CEPT message telephone circuits will not have a significant effect on the overall use of North Atlantic cable and satellite facilities. Therefore, we adopt our tentative conclusion that such circuits should be exempted from circuit distribution restrictions.

D. AT&T's U.S.-CEPT Message Telephone Circuits

48. *Need for and Period of Guidelines.* As was the case with the responses to our Third Notice of Inquiry, none of the respondents to our NPRM took the position that the U.S.-CEPT message telephone service market is now sufficiently competitive to warrant our total removal from circuit distribution decisions at the end of 1985. That is, the market is not

now sufficiently competitive to assure that loading decisions are based on the price and availability of a particular facility rather than on some other, non-marketplace factors. All of the NPRM respondents recognize that AT&T is the major provider of U.S.-CEPT message telephone service. Our analysis indicates that as of year-end 1984, AT&T employed approximately 89 per cent of all circuits in service between the U.S. and CEPT and 99.8 per cent of all circuits used for IMTS between the U.S. and CEPT. In addition to its market position, AT&T can be expected to prefer cable use as a cable manufacturer and as a rate base regulated carrier. Quite clearly, it is the distribution of AT&T's U.S.-CEPT message telephone circuits which, in large measure, determines the overall use and availability of the cable and satellite facilities used to provide U.S.-CEPT services, the levels of revenues of both Comsat and INTELSAT, and the rates charged by these entities. This is particularly true when substantial excess capacity exists.

49. The recent entry of additional providers of U.S.-CEPT message telephone service, such as GTE Sprint and MCI, and the proposed entry of additional entities such as Comsat, can be expected to effect a change in the U.S.-CEPT message telephone market. AT&T's share of this market may decline and a viable marketplace mechanism for the cost-effective distribution of circuits used for IMTS may develop. However, it is clear that these changes will not progress sufficiently by year-end 1985 to warrant our removal from decisions concerning the distribution of AT&T's U.S.-CEPT message telephone circuits immediately at that time. Indeed, even AT&T does not advocate that we remove ourselves from those decisions until year-end 1989. Consequently, we affirm our tentative finding that the U.S.-CEPT message telephone service market is not yet sufficiently competitive to permit us to withdraw from decisions concerning the distribution of AT&T circuits used to provide that service.

50. AT&T suggests that we not specify any circuit distribution guideline which extends beyond 1989. Most other parties suggest guidelines which would extend beyond that date. We believe that establishing a fixed date for the termination of loading guidelines which does not take into account the development of competition in the provision of IMTS is not in the public interest. We can not now be certain that by year-end 1989 competition in the provision of U.S.-CEPT message telephone service will have increased enough to provide an effective marketplace mechanism for the cost-efficient distribution of circuits used for that service and to offset existing biases. While we do recognize that other carriers are entering the U.S.-CEPT message telephone service market, we also recognize that the pace of competitive marketplace development is not fully predictable. The international telecommunications market is entering a transition period in which we should retain the ability to quickly modify either the methodolo-

gy or period as circumstances warrant. It is not impossible that service and facility competition in the North Atlantic Region could develop more rapidly than we previously anticipated and that such developments could quicken the establishment of a marketplace mechanism for the distribution of circuits. We therefore will not adopt our tentative conclusion to utilize a methodology for six years. We view that period as simply being too long. Instead, we will prescribe a methodology's use for three years (1986-1988). Prior to year-end 1988 we shall review the development of competition in the provision of U.S.-CEPT IMTS and prescribe appropriate loading guidelines, if any, for the post-1988 period. We shall also specifically retain jurisdiction to review at any time during the 1986-1991 period, either on our own motion or on the request of an interested party, the circuit distribution guidelines we here adopt for all circuits and to alter those guidelines as the then existing marketplace conditions warrant.[20] These conditions would include the development of competition as well as the effects of regulating loading on the price of satellite circuits and on the level and mix of investment in international facilities.

51. *The Balanced Loading Methodology.* As argued by Comsat and noted by us in our NPRM, adoption of balanced loading as the basis for circuit distribution guidelines would continue to provide service reliability benefits such as reducing to a minimum the number of circuits interrupted upon failure of a major transmission facility. It also provides a predictable and automatic technique by which to handle deviations of actual demand from forecasted traffic levels. Under AT&T's most recent forecast of U.S.-CEPT message telephone circuits requirements for the 1986-1991 period, continued use of the balanced loading methodology as the basis for circuit distribution guidelines would result in approximately 48.2 percent of all the additional circuits AT&T requires during that period being placed on satellite facilities. For the 1986-1988 period, the balanced loading methodology would result in a smaller percent of growth traffic being placed on satellite facilities, depending on the exact ready for service date of TAT-8. We are not persuaded that guidelines which

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[20] As we indicated in our NPRM, we shall also soon begin to examine the facilities requirements and options available during the 1992-1995 portion of the current planning period and examine the effect of various potential circuit distributions for that period. While we gather the information for that process, we will monitor the development of competition in the provision of U.S.-CEPT message telephone service and the development of a marketplace mechanism for the cost-effective distribution of circuits. A variety of factors, including the extent to which effective competition develops will determine how much we need to involve ourselves in developing formal guidelines for the construction of facilities and the distribution of circuits for the remaining portion of the planning period. We also recognize that there may be a parallel between the development of competition so as to establish an effective marketplace mechanism for the distribution of circuits and the development of competition which we are analyzing in our International Competitive Carrier proceeding.

guarantee Comsat and INTELSAT approximately one-half of AT&T's growth circuits provide a strong enough incentive for Comsat vigorously to pursue entry into the U.S.-CEPT message telephone market or to compete for the placement on satellite facilities of the circuits used by providers of that service. We also believe that the guaranteed placement on satellite facilities of such a large percentage of AT&T's U.S.-CEPT message telephone circuits would not provide a sufficiently strong incentive to INTELSAT to operate and price its capacity competitively. We also are concerned that the nearly equal distribution of these circuits over the 1986-1991 period would not provide strong incentives for Comsat, INTELSAT or AT&T to plan, build and operate efficient, cost effective facilities for the post-1991 period. These factors continue to convince us that continued use of the balanced loading methodology will not foster the transition of the U.S.-CEPT message telephone market from a regulated environment to one subject to marketplace forces. Therefore, we affirm our tentative conclusion that the balanced loading methodology should not be adopted as the basis for 1986-1988 circuit distribution guidelines.

52. *The NTIA Cost-Based Circuit Distribution Method.* While NTIA continues to advocate the use of its cost-based circuit distribution methodology, it, like the other parties commenting on that proposal, now recognizes that the current state of development of its proposal does not permit us to adopt it at this time. Thus, NTIA now proposes that we adopt the 2 percent guidelines we tentatively prefer for two years as a mechanism to permit development of and transition to the NTIA proposal at the end of 1987.

53. As we indicated in our NPRM, we believe that the NTIA proposal could provide a number of advantages such as encouraging the development of an unbiased market for cable and satellite circuits and resulting in the least-cost combination of cable and satellite facilities capable of satisfying demand for service at adequate levels of service quality. However, we also retain our concern that the NTIA proposal is not fully defined, that it could require a substantial and continued level of regulatory intervention in circuit distribution decisions, and that the annual recalculation of per circuit revenue requirements and circuit distributions called for by this approach could complicate facilities planning by the carriers, their correspondents, Comsat and INTELSAT. We also noted the lack of support that this proposal received from our foreign counterparts.

54. Under these circumstances, we cannot conclude that NTIA's still not fully defined proposal should be adopted at either year-end 1985 or year-end 1987 as the basis for circuit distributions. The NTIA proposal (or any other circuit distribution proposal) could not be adopted until it is fully defined and evaluated. Since we have indicated our intention to review the

circuit distribution guidelines for the post-1988 period, NTIA may have a further opportunity to develop its methodology.

55. *The Multi-Tier Circuit Distribution Proposal.* We also conclude that we should not now adopt a multi-tiered circuit distribution methodology. While this methodology does emphasize the importance we place on the acquisition of operating agreements by additional U.S. carriers for IMTS, a multi-tier approach is more complex and would require more regulatory intervention that would the 2 percent methodology for which we expressed a tentative preference. As we suggested in our NPRM, and as is recognized by a number of the commentors, the multi-tier proposal also requires further consideration of questions such as those concerning the treatment to be accorded message telephone circuits used to countries with small traffic volumes which might find interconnection with multiple U.S. IMTS providers uneconomical and the definition of circumstances under which the provision of message telephone service to a given country should be deemed sufficiently competitive to warrant permitting the higher degree of loading flexibility for AT&T message telephone circuits.[21] We also note that this proposal received limited support from U.S. carriers and was opposed by our carriers' foreign correspondents.

56. While we do not believe that implementation of a two tier methodology would be unduly difficult, we conclude that a multi-tier methodology is currently not the best approach for loading AT&T's U.S.-CEPT IMTS circuits. We particularly note that U.S. IMTS providers other than AT&T have successfully negotiated operating agreements to provide service to the largest market (the U.K.) and have obtained operating agreements or are negotiating agreements with other administrations (Belgium, Sweden, Denmark, France, Italy, Spain and Portugal). Nevertheless, since we will review our circuit distribution guidelines before the end 1988, the multi-tiered circuit distribution proposal may be studied further.

57. *The Phase-In Proposals.* We analyzed in the NPRM the traffic and revenue impact on both Comsat and INTELSAT of the various phase-in methodologies. We made calculations for the 1986-1991 period employing AT&T's proposal as well as 2, 2.5 and 3 percent annual increases (with a 60 per cent cap) in flexibility for AT&T and compared them with calculations employing balanced loading. Based on an August 31, 1984

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[21] As to countries with small IMTS traffic volumes, at least two options exist. One solution would be simply to exempt those countries from any methodology or to move them into the higher tier. The other solution would be to apply the methodology with no exceptions. The trigger mechanism could be any one of several: acquisition of a certain number of operating agreements; the acquisition of operating agreements by certain competitors to AT&T; the operation of a certain number or percentage of circuits by AT&T's competitors; or a finding of nondominance for AT&T in our International Competitive Carrier proceeding.

forecast submitted by AT&T, we calculated that AT&T's proposal would permit it to route approximately 85 per cent of all traffic growth over cable and that the other approaches (*i.e.* 2.0, 2.5 and 3.0 per cent annual increases with a 60 per cent cap for the 1986-1991 period) would permit AT&T to route approximately 67 per cent of all traffic growth over cable.[22] If demand fell short of the forecast, then the percentage of growth traffic which AT&T could route over cable under any of these phase-in guidelines would increase. If demand exceeded the forecast, then additional growth traffic would be routed over satellite and cable facilities. We calculated, making certain assumptions as to long term rates and activation dates, the financial impact of these proposals on both Comsat and INTELSAT. As compared to balanced loading, we indicated that Comsat would receive $90.12 million, $117.99 million, $134.22 million and $218.19 million less revenues under the 2 per cent, 2.5 per cent, 3.0 per cent and AT&T proposals, respectively. As compared to balanced loading, INTELSAT would receive $66.32 million, $86.82 million, $98.77 million and $160.55 million less under these same four approaches.[23]

58. We also evaluated in the NPRM the competitiveness of the international IMTS market and the existence of certain biases. As indicated above, we tentatively concluded that the provision of IMTS was not subject to significant competitive forces and that a marketplace mechanism for the distribution of circuits did not now exist. We therefore tentatively concluded in the NPRM that AT&T's proposal would be too severe and that permitting AT&T two per cent annual flexibility for six years might better balance the various financial and competitive factors.

59. AT&T criticizes our analysis in two respects. First, AT&T asserts that the method we used to calculate revenue loss or shortfall assumes all satellite circuits added in a given year are activated on the first day of the year. AT&T argues that this methodology inflates the effect of the various phase-in guidelines on Comsat's revenues because the activation of satellite circuits historically is distributed throughout the year. AT&T suggests that we should utilize a methodology which more closely reflects the usual pattern of satellite circuit activations.

60. AT&T also argues that the assumption used in our analysis that Comsat's tariff rate for satellite voice circuits will remain at the current

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[22] While a cap would equalize the total number of circuits placed over cable, the different rates at which the cap was reached would impact satellite revenues in distinct fashions.

[23] Of course, to the extent that Comsat and INTELSAT have fixed revenue requirements, a revenue shortfall could be partially or fully offset by rate increases. To the extent that these figures represent revenue differences rather than actual revenue requirement shortfalls, the impact may be to slow the rate of rate decreases. Depending on world-wide traffic growth and loading, INTELSAT Signatory ownership shares, revenue requirements, capital costs and expenses, the rate impact on either Comsat or INTELSAT could be substantial.

level throughout the 1986-1991 period is unrealistic. AT&T asserts that rate reductions by Comsat and INTELSAT have been the historic pattern and are made more likely "... in the face of the increasing competition—both from possible 'private' and common carrier cable systems and from competing satellite systems." Therefore, AT&T concludes that the assumption that Comsat rates will remain at current levels throughout the 1986-1991 inflates our calculation of the effect on Comsat's revenues of the various flexibility phase-in circuit distribution methodologies.

61. While AT&T has employed the identical methodology it now criticizes for calculating revenues, we agree that a methodology which averages circuit activations over the course of a year would result in more accurate revenue calculations.[24] However, we cannot accept the suggestion that we assume lower space segment charges for calculating a revenue differential. First, AT&T has provided no forecast, loading, or revenue requirement data supporting the use of a lower space segment charge. Further, while technology may indeed drive down construction costs on a per circuit basis, the revenue requirement for each circuit used may actually increase as the expensive INTELSAT VI series of satellites is procured and the degree of loading flexibility given to AT&T increases.[25]

62. We have redone the calculations we performed in our NPRM using the satellite circuit activation method suggested by AT&T for calculating revenues but retaining the assumption that Comsat's tariff rate and INTELSAT's unit charges for satellite voice circuits would remain the same throughout the 1986-1991 period.[26] (Because of inflation that will occur over this period, holding rates constant does result in a price reduction in 1985 dollars.) Using the same traffic forecast employed in the

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[24] In its attachment 2 of its November 2, 1984 Final Comments in this docket, AT&T sets forth for the 1986-1989 period its calculation of Comsat's global satellite voice circuit revenues assuming continuation of the balanced loading circuit distribution for U.S.-CEPT message telephone circuits, Comsat's global revenues for satellite voice circuits assuming adoption of AT&T's proposed three percent guidelines for U.S.-CEPT message telephone circuits and the yearly difference between these two revenue calculations. AT&T's calculations in this case assumed that all satellite circuits added during a given year are activated on January 1st.

[25] Even if AT&T's methodology would route enough traffic over satellite to permit a lowering of Comsat's per circuit space segment rate, we note that an even greater percentage of traffic routed over satellite would ordinarily lead to even lower satellite rates. That is, as a rate base regulated entity with a certain revenue requirement, Comsat's per circuit space segment rate would generally increase if fewer satellite circuits are leased and generally decrease if more satellite circuits are leased.

[26] Although we have prescribed a methodology for only three years (1986-1988), for ease of comparison with the NPRM and the filings of the parties our calculations cover both the six years (1986-1991) of the planning period and the three years (1986-1988) that the prescribed methodology will be utilized.

NPRM, our calculations indicate that during the 1986-1991 period Comsat and INTELSAT, respectively, would receive approximately $167.19 million and $123.3 million less if the AT&T 3 percent proposal is adopted than they would if the balanced loading methodology was continued. The equivalent revenue amounts for Comsat and INTELSAT calculated in our NPRM were $218.18 million and $160.55 million, respectively. Performing the same calculation for the 2 percent guidelines for which we have expressed our tentative preference, we find that Comsat and INTELSAT, respectively, would receive approximately $67.37 million and $49.58 million less revenues if the 2 percent guidelines are adopted compared to the revenues they would receive if the balanced loading guidelines were continued. The equivalent revenue figures as calculated in our NPRM were approximately $90.12 million and $66.32 million for Comsat and INTELSAT, respectively.

63. Using the most recent forecast, which reflects a lower traffic growth rate, the difference in terms of revenue between balanced loading and the various phase-in proposals would decrease. Our calculations disclose that during the 1986-1991 period Comsat and INTELSAT, respectively, would receive approximately $135.71 million and $99.86 million less revenues if the AT&T proposed 3 percent guidelines were adopted than they would receive if the use of the balanced loading methodology was continued. We calculate the reduction in revenues from balanced loading levels which would occur if the 2 percent guidelines were adopted as approximately $59.73 million and $43.95 million for Comsat and INTELSAT respectively. The details of these calculations and the distributions on which they are based, are set forth in Appendix 1 attached to this Report and Order.[27] These calculations in short form, are as follows:

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[27] As we recognized in footnote 34 of our NPRM, a number of factors could alter the results of our revenue analysis. These include changes in AT&T's traffic forecast, changes in Comsat's or INTELSAT's rates, and the degree to which TDMA/DSI equipment is used in the provision of AT&T's U.S.-CEPT message telephone service since the tariff and INTELSAT unit charge is lower for derived circuits than for FDMA circuits.

REVENUE REDUCTION TABLE

	Comsat	*INTELSAT*	*Comsat*	*INTELSAT*
Assumptions:	AT&T 3% Plan	AT&T 3% Plan	2% Plan	2% Plan
NPRM	$218M	$161M	$90M	$66M
NPRM but Averaged activations	$167M	$123M	$67M	$50M
NPRM but Averaged activations and new forecast	$136M	$100M	$60M	$44M

64. While these modifications to our calculations indicate less of a difference between the balanced loading and various phase-in approaches, they are still substantial. For the 1986-1988 period for which we are adopting guidelines, we now calculate that adoption of AT&T's 3 percent proposal would result in approximately $25 million and $18 million less revenues for Comsat and INTELSAT, respectively, than these entities would receive if the balanced loading methodology continued to be used. Adoption of the 2 percent guidelines for this three year period would result in approximately $14 million and $10 million less revenue for Comsat and INTELSAT, respectively than they would receive under balanced loading guidelines.[28] Most importantly, the above calculations do

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[28] The reduction in Comsat and INTELSAT revenues under the AT&T 3 percent guidelines and the 2 percent guidelines compared to the revenues these entities would receive under balanced loading are less for the three year 1986-1988 period than for the entire six year 1986-1991 period. The range of percentage increase in Comsat's per circuit space segment revenue requirements is likewise smaller for the three year 1986-1988 period than for the full six year 1986-1991 period. This is, of course, to be expected for a number of reasons. The first, and most obvious, reason is that where, as here, we have three circuit distribution methodologies which result in satellite facilities loading which diverges each year, the effect on satellite circuit providers' revenues and on the per circuit revenue requirements for space segment will be less for a three year period than for the full six year period. Moreover, since the three year period with which we are here concerned is the initial period of implementation for new circuit guidelines, it is also the period during which the AT&T 3 percent guidelines and the 2 percent guidelines diverge the least. Consequently, the difference in the effects of these two methodologies on satellite circuit revenues and per circuit space segment revenue requirements compared to balanced loading will be the least during this period.

In addition, the fact that the balanced loading methodology permits all traffic to be loaded on the TAT-8 cable entering service in 1988 until that transmission path is carrying the same number of circuits as existing transmission paths with available capacity significantly reduces the difference in the effect of the AT&T 3 percent guidelines and the 2 percent guideline on satellite circuit revenues and per circuit revenue requirements for space segment when compared with balanced loading. As may be noted from the table set forth as Appendix 1, the balanced loading guidelines would permit more circuits to be placed on cable facilities during 1988 than either the 2 percent not alter the characteristics of the present market. AT&T continues to be the major user of all circuits, the major user of circuits for IMTS and an entity with a clear and understandable preference for cable facilities. Competition in the provision of IMTS is only now developing and a marketplace mechanism for the efficient use of circuitry does not now exist. Further, Comsat and INTELSAT continue to rely on AT&T for a significant portion of their traffic and revenues, and have relatively fixed investments and revenue requirements for the 1986-1991 period. The $135.71 million and $99.86 million reduction in the revenues Comsat and INTELSAT would receive under AT&T's proposed 3 percent guidelines, as compared to their revenues from a balanced loading distribution, is less than the differential we calculated in our NPRM using AT&T's earlier, higher forecast and a different methodology for calculating satellite activations. Nevertheless, these figures would be a significant reduction in the revenues of these entities and represent reductions greater than those we found "acceptable" in the NPRM. Moreover, as Comsat states, the fact that the lower traffic forecast reduces the revenue differential between the balanced loading methodology and AT&T's proposed 3 percent guidelines benefits neither Comsat nor INTELSAT. To the contrary, the revenues these entities will now receive under any particular loading methodology will be less because they will be handling less traffic. We find that AT&T's proposed guidelines for the 1986-1991 period, which would place approximately 82 percent of the additional U.S.-CEPT message telephone circuits on cable facilities while placing only 18 percent of such circuits on satellite facilities, would apportion too great a percentage of growth traffic to one medium under the present market conditions.[29] We reach the same conclusion for the use of AT&T's proposed guidelines for the 1986-1988 period as this proposal would place over seventy percent of growth traffic on cable facilities.

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guidelines or AT&T's proposed 3 percent guidelines. Indeed, at year-end 1988, balanced loading guidelines would result in the activation of approximately 56 more cable circuits than could be activated under the 2 percent guidelines. However, this does not mean that adoption of the 2 percent guidelines will result in less cable use and more satellite use over the 1986-1988 period. To the contrary, during this three year period the balanced loading methodology would result in 27,965.5 circuit years of satellite use while the 2 percent guidelines and AT&T's 3 percent guidelines would result in 26,897 and 26,043 circuits years of satellite use, respectively.

[29] The circuit distribution based on AT&T's proposed 3 percent guidelines and its earlier, higher traffic forecast would have placed 85 percent of all growth circuits on cable facilities. In its current distribution based on a smaller traffic forecast, AT&T projects activating 274 and 458 satellite circuits in 1990 and 1991, respectively, as compared to 12 and 15 satellite circuits for these two years under its previous distribution based on a large traffic forecast. This modification results in the 18 percent figure.

65. We further conclude that the approximately $14 million and $10 million reduction in the revenues Comsat and INTELSAT, respectively, will receive in the 1986-1988 period under the 2 percent guidelines compared to the revenues they would receive under balanced loading guidelines, coupled with the adverse revenue effects of a lower traffic forecast, will provide a strong incentive for Comsat to enter the U.S.-CEPT message telephone market and for INTELSAT and Comsat to work toward developing a more cost effective satellite system. However, we do not believe these revenue reductions will place undue pressure on Comsat or INTELSAT rates. Since the 2 percent guidelines permit AT&T to place up to 63.31 percent of the additional circuits it projects it will require during the 1986-1988 period on either cable or satellite facilities, we believe that these guidelines provide AT&T with sufficient flexibility.

66. The calculations in paragraphs 62-65 assumed a constant INTELSAT utilization charge of $390 per circuit per month and a constant bundled Comsat rate of $1060 per circuit per month. The focus was on quantifying the impact of various loading methodologies on INTELSAT and Comsat. By holding rates to carriers and users constant, there was, in a sense, no impact on these entities. However, as a rate base regulated entity with a relatively fixed investment for the 1986-1991 period, it may not be appropriate to assume that Comsat's rates to carriers and users will not change depending on the loading methodology employed. Similarly, INTELSAT has a relatively fixed investment for the 1986-1991 period and pays its signatories, pursuant to Articles 4 and 8 of the INTELSAT Operating Agreement, a return on their investments (currently 14 per cent). Thus it also may be inappropriate to assume that INTELSAT's utilization charge will remain constant under all loading methodologies. We now therefore consider the impact of the various loading methodologies on Comsat's rates and specifically on Comsat's unbundled space segment charge.[30] While AT&T's total revenue requirement and rates may not be measurably affected by changes in Comsat's rates, users and other carriers will be more demonstrably impacted and the development of intermodal competition could be adversely affected.

67. We conclude from our analysis that the reduction in the number of leased satellite circuits resulting from AT&T's proposal would place a degree of upward pressure on space segment rates which is inconsistent with the public interest.[31] We also conclude that, on balance, a 2 per cent

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[30] We do not attempt here to calculate future INTELSAT utilization charges.

[31] Because INTELSAT will be using either existing satellites or satellites which are already being procured pursuant to binding contracts to provide service during the 1986-1991 period, its facilities costs are basically fixed for that period. INTELSAT can only recover its revenue requirements for its fixed investment from revenues generated by circuits used to provide service. Consequently, the lower forecast, by reducing the number of circuits AT&T and other carriers will employ, will place upward pressure on

per year approach would not place undue pressure on Comsat's space segment rates. In estimating what Comsat's space segment rates would be under the 2 per cent, AT&T 3 per cent and balanced loading methodologies proposed in this docket for the 1986-1991 period we have employed AT&T's traffic forecast and assumed various revenue requirement levels. Because additional cable systems and loading proposals are being considered in the Pacific and Caribbean planning dockets our analysis has isolated the space segment capacity used to provide U.S.-CEPT IMTS and the revenue requirement which corresponds to this capacity. While we recognize that any analysis which employs what might be an overly optimistic traffic forecast, which makes assumptions as to Comsat's future space segment revenue requirements, and which attempts to estimate a regional rather than a global space segment rate can be criticized, we believe that the trends developed by such an analysis are valid and useful. We have charted the three loading methodologies for the 1986-1991 period with space segment revenue requirements ranging from $165 million to $265 million.[32] We have calculated that 83.47 per cent of Comsat's total space segment revenue requirement is allocated to voice circuit leases (the remaining 16.53 per cent of Comsat's space segment revenue requirement is allocated to transponder leases and other services) and that 42.44 per cent of all IMTS voice circuits leased by Comsat are to AT&T for U.S.-CEPT IMTS. Using these two percentages, AT&T's forecast and the various revenue requirements we can derive Comsat's U.S.-CEPT IMTS circuit rates for the 1986-1991 period for any loading methodology.[33] It is self evident that Comsat's space segment rates will decline the most (or increase the least) the lower the revenue requirement and the higher the satellite usage. Similarly, Comsat's space segment rates will decline the least (or increase the most) the greater the revenue requirement and the lower the satellite usage.

68. As shown in Table 2 of Appendix 2, our analysis indicates that, as compared to balanced loading, AT&T's proposed 3 percent guidelines would result in per circuit space segment rates which range for the 1986-

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INTELSAT's rates. Comsat may experience the same upward pressure on its rates to satisfy its revenue requirements. If Comsat's rates increase, then AT&T's expenses (specifically satellite lease charges paid to Comsat) may also increase, exerting an upward pressure on AT&T's rates to users.

[32] The $165 million space segment revenue requirement figure is found in Comsat's June 5, 1985 tariff transmittal No. 565. The upper limit and numbers in between were derived simply by adding to Comsat's space segment revenue requirement $10 million, $15 million or $20 million per year for the 1986-1991 period. Past investment patterns and our general knowledge of INTELSAT's future procurement plans would indicate that it is likely that Comsat's investments and expenses will generate an annual revenue requirement within this range.

[33] The full results of these calculations as well as the methodology used are found in Appendix 2.

1988 period which range from *6.76* percent to *7.11* percent higher. (For the entire 1986-1991 period this range would be from 13.90 to 15.69 percent higher). As compared to balanced loading, our tentatively preferred 2 percent guidelines would result in per circuit space segment rates for the 1986-1988 period from *3.72* percent to *3.86* percent higher. (For the entire 1986-1991 period this range would be from 5.61 to 6.06 percent higher). Our analysis also indicates that the balanced loading and 2 percent circuit distribution methodologies produce space segment per circuit rates which are lower than the existing space segment charge under all revenue requirement assumptions. On the other hand, if the revenue requirement increases by $20 million per year then AT&T's proposal would result in space segment rate increases each year within the planning period. Of course, the rate decrease will be the greatest under balanced loading and the least under AT&T's 3 percent guidelines.

69. This analysis tends to confirm the conclusions drawn from our other analysis that adoption of AT&T's proposed 3 percent guidelines could place undue upward pressure on the rates for satellite circuits. The approximately 7 percent higher per circuit revenue requirements produced by the AT&T proposal, when compared to the balanced loading methodology, and the potential that the AT&T proposed guidelines could actually lead to higher space segment rates if Comsat's actual total space segment revenue requirements increase to a level near our upper limit assumption leads us to conclude that the AT&T proposal may hinder rather than foster the development of intermodal competition.

70. In view of the foregoing, we conclude that AT&T's proposed 3 percent guidelines are too severe and that the 2 percent guidelines we tentatively prefer will better balance the various financial and competitive factors. Nothing presented in the comments filed in response to our NPRM persuades us that the 2 percent guidelines are not the most appropriate of the transitional mechanisms which we have examined. Therefore, we conclude that we should affirm our tentative conclusions that, using the cable-satellite distribution of AT&T's U.S.-CEPT message telephone circuits existing at the end of 1985 as a base, AT&T should be permitted, but not required, to increase the number of its U.S.-CEPT message telephone circuits it places on either cable or satellite facilities by 2 percent per year. Because we have analyzed the traffic, revenue and rate implications of the various proposals over a three year period, we shall permit AT&T to carry-over, but not borrow, unused flexibility. Thus, the two per cent per year guideline shall be cumulative.[34]

71. *Treatment of AT&T Circuits Used For Its 800 Service-Overseas.* We agree with GTE Sprint's contention that circuits used by AT&T for

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[34] Because we are adopting a two per cent methodology for only three years, we need not address the issue of a 60/40 cap. That is, there will be no cap.

the provision of its 800 Service-Overseas should be subjected to the circuit distribution guidelines we are here adopting. The circuits used to provide 800 Service-Overseas are part of the switched voice network used by AT&T to provide U.S.-CEPT message telephone service. Consequently, the same considerations should apply to circuits used for both of these services. Therefore, we conclude that the circuits used by AT&T to provide its 800 Service-Overseas should be subjected to the same circuit distribution guidelines as its circuits used for the provision of U.S.-CEPT message telephone service. Circuits used by AT&T to provide 800 Service-Overseas shall therefore be aggregated with IMTS circuits for loading purposes.

E. ARINC Whole Circuit Proposal

72. We need to address one final issue. In response to the NOI, ARINC proposed that we explore the possibility of restructuring the ownership arrangements for international submarine cables. (U.S. entities and foreign correspondents own undivided half interests in circuits.) ARINC requested us to change cable ownership to an arrangement where U.S. entities and their correspondents would each separately purchase their own whole circuits (the whole-circuit policy). We note that ARINC first raised its whole circuit-ownership argument in connection with our consideration of the U.S. carriers' application for authorization to construct the TAT-8 cable. File No. I-T-C-84-072. ARINC requested us to condition our grant of authority upon the carriers' agreeing to modify the TAT-8 agreement to require whole-circuit ownership. We denied ARINC's request as having been presented too late in the TAT-8 proceeding and suggested that it might better pursue the question in the facilities planning process, particularly the North Atlantic Consultative Process. *See* FCC 84-240 para. 51, note 21.

73. In the NPRM, we tentatively concluded that ARINC's proposal that we require ownership in TAT-8 and future cables to be on a whole-circuit basis should not be considered in this phase of this docket. We stated that ARINC's proposal was not germane to the question of the circuit-distribution guidelines which should be adopted for use in the post-1985 period and that those guidelines would not affect ARINC's proposal. We indicated that ARINC's proposal, if adopted, would effect major changes in the present structure of international facilities ownership and in the established operating relationships between the U.S. carriers and their overseas correspondents. We also noted that ARINC raised its request at a meeting of the North Atlantic Consultative Process and that is the proper forum in which to address ARINC's proposal.[35]

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[35] The CEPT entities did not support this proposal, expressing satisfaction with existing ownership arrangements.

74. In response to the NPRM, ARINC reiterated its whole circuit ownership proposal and argued that this issue should be resolved in a policy proceeding rather than in the consultative process. We affirm our tentative conclusion that the issue is not germane to the limited question of circuit distributions. We will consider this issue in the subsequent phase of this docket. See paragraph 50, n. 20.[36]

III. Ordering Clauses

75. Accordingly, IT IS ORDERED, pursuant to Section 4(i), 4(j), 201-205, 214 and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§154(i), 154(j), 201-205, 214, 403 (1976) that the circuit distribution guidelines for the 1986-1991 period set forth above ARE ADOPTED.

76. Pursuant to Section 605(b) of the Regulatory Flexibility Act 5 U.S.C. §§605, IT IS CERTIFIED, that Sections 603 and 604 of the Act do not apply because the circuit distribution policies adopted herein is a rule of particular applicability to the American Telephone and Telegraph Company and is, hence, not subject to the Regulatory Flexibility Act.

77. IT IS FURTHER ORDERED, that AT&T shall file by September 20, 1985, a regional circuit distribution plan for the 1986-1988 period for its U.S.-CEPT message telephone circuits based upon its most recent traffic forecast which complies with the circuit distribution guidelines set forth herein. The U.S. TAT-8 co-owners shall also file, consistent with paragraph 87 of our TAT-8 order, country-by-country loading plans for the TAT-8 facility for 1988.[37] Each carrier shall further retain comprehensive information demonstrating the implementation of its circuit distribution plan on a country-by-country basis.[38]

78. IT IS FURTHER ORDERED that the U.S. international carriers are authorized to activate their previously authorized U.S.-CEPT circuits in North Atlantic facilities in accordance with the circuit distribution guidelines adopted herein.

79. IT IS FURTHER ORDERED, that this rulemaking phase of CC Docket No. 79-184 IS TERMINATED.

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[36] We also note that non-carrier ownership of submarine cable circuits is tentatively proposed in our Notice of Proposed Rulemaking in International Communications Policies Governing Designation of Recognized Private Operating Agencies, Grant of IRUs in International Facilities and Assignment of Data Network Identification Codes, CC Docket No. 83-1230, Notice of Proposed Rulemaking, FCC 85-369 (released August ____, 1985).

[37] *See* AT&T *et al.*, FCC 84-240 (released June 8, 1984). This filing will obviate the need for separate Section 214 applications for circuit activations consistent with the carriers' loading plans. Activations not consistent with the submitted plans would require separate authorization.

[38] Such data may be requested by the Commission during its consideration of future loading policies.

80. IT IS FURTHER ORDERED that the Secretary of the Commission shall cause this Second Report and Order to be published in the Federal Register and shall mail a copy of this decision to the Chief for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

WILLIAM J. TRICARICO, *Secretary*

APPENDIX 1

COMPARISON OF THE APPLICATION OF CIRCUIT DISTRIBUTION GUIDELINES TO AT&T'S U.S.-CEPT MTS TRAFFIC

YEAR	1986		1987		1988		1989		1990		1991		
AT&T FORECAST/Nov. 84	17010		19540		22933		26785		31295		36583		
BALANCED LOADING													
	C	S	C	S	C	S	C	S	C	S	C	S	
Percent Cable/Sat.	48.8	51.2	47.3	52.7	54.5	45.5	54.7	45.3	52.9	47.1	50.8	49.2	
No. of Cable/Sat. Cir.	8303	8707	9252	10288	12491	10442	14647	12138	16566	14729	18587	17996	
No. of Cable/Sat. Cir. Added	1004	1208	949	1581	3239	154	2156	1696	1919	2591	2021	3267	
AT&T PROPOSAL													
	C	S	C	S	C	S	C	S	C	S	C	S	
Percent Cable/Sat.	51.0	49.0	53.9	46.1	57.0	43.0	60.0	40.0	64.9	35.1	68.7	31.3	
No. of Cable/Sat. Cir.	8671	8339	10529	9011	13069	9864	16078	10707	20314	10981	25144	11439	
No. of Cable/Sat. Cir. Added	1372	817	1858	672	2540	853	3009	843	4236	274	4830	458	
Sat. Cir. Year Difference Compared to Balanced Loading		–172.5		–822.5		–927.5		–1004.5		–2589.5		–5152.5	TOTAL –10669

COMPARISON OF THE APPLICATION OF CIRCUIT DISTRIBUTION GUIDELINES TO AT&T'S U.S.-CEPT MTS TRAFFIC

YEAR		1986	1987	1988	1989	1990	1991	
AT&T FORECAST/Nov. 84		17010	19540	22933	26785	31295	36583	
Revenue Difference Compared to Balanced Loading	COMSAT	–$2.19M	–$10.46M	–$11.8M	–$12.78M	–$32.94M	–$65.54M	–$135.71M
	INTELSAT	–$1.61M	–$7.70M	–$8.68M	–$9.40M	–$24.24M	–$48.23M	–$99.86M

2 PERCENT INCREASED FLEXIBILITY PER YEAR—60 PERCENT MAXIMUM

		C	S	C	S	C	S	C	S	C	S	C	S	
Percent Cable/Sat.		50.0	50.0	52.0	48.0	54.2	45.8	56.1	43.9	58.0	42.0	60.0	40.0	
No. of Cable/Sat. Cir.		8504	8506	10159	9381	12435	10498	15025	11760	18163	13132	21948	14635	
No. of Cable/Sat. Cir. Added		1205	984	1655	875	2276	1117	2590	1262	3138	1372	3785	1503	
Sat. Cir. Year Difference Compared to Balanced Loading			–89		–554		–425.5		–161		–987.5		–2479	TOTAL –4696
Revenue Difference Compared to Balanced Loading	COMSAT		–$1.13M		–$7.05M		–$5.41M		–$2.05M		–$12.56M		–$31.53M	–$59.73M
	INTELSAT		–$0.83M		–$5.19M		–$3.98M		–$1.51M		–$9.24M		–$23.20M	–$43.95M

COMPARISON OF THE APPLICATION OF CIRCUIT DISTRIBUTION GUIDELINES TO AT&T'S U.S.-CEPT MTS TRAFFIC

YEAR	1986	1987	1988	1989	1990	1991	
AT&T FORECAST/Nov. 84	17010	19540	22933	26785	31295	36583	

2.5 PERCENT INCREASED FLEXIBILITY PER YEAR—60 PERCENT MAXIMU M

		C	S	C	S	C	S	C	S	C	S	C	S	
Percent Cable/Sat.		50.5	49.5	53.0	47.0	55.5	44.5	58.0	42.0	60.0	40.0	60.0	40.0	
No. of Cable/Sat. Cir.		8590	8420	10356	9184	12728	10205	15535	11250	18784	12511	21948	14635	
No. of Cable/Sat. Cir. Added		1291	898	1766	764	2372	1021	2807	1045	3249	1261	3164	2124	
Sat. Cir. Year Difference Compared to Balanced Loading			–132		–695.5		–670.5		–562.5		–1553		–2789.5	TOTAL –6403
Revenue Difference Compared to Balanced Loading	COMSAT		–$1.68M		–$8.85M		–$8.53M		–$7.16M		–$19.75M		–$35.48M	–$81.45M
	INTELSAT		–$1.24M		–$6.51M		–$6.28M		–$5.27M		–$14.54M		–$26.11M	–$59.95M

3 PERCENT INCREASED FLEXIBILITY PER YEAR—60 PERCENT MAXIMUM

	C	S	C	S	C	S	C	S	C	S	C	S	
Percent Cable/Sat.	51.0	49.0	53.9	46.1	57.0	43.0	60.0	40.0	60.0	40.0	60.0	40.0	
No. of Cable/Sat. Cir.	8671	8339	10529	9011	13069	9864	16078	10707	18784	12511	21948	14635	
No. of Cable/Sat. Cir. Added	1372	817	1858	672	2540	853	3009	843	2706	1804	3164	2124	

COMPARISON OF THE APPLICATION OF CIRCUIT DISTRIBUTION GUIDELINES TO AT&T'S U.S.-CEPT MTS TRAFFIC

YEAR		1986	1987	1988	1989	1990	1991	
AT&T FORECAST/Nov. 84		17010	19540	22933	26785	31295	36583	
Sat. Cir. Year Difference Compared to Balanced Loading		–172.5	–822.5	–927.5	–1004.5	–1824.5	–2789.5	TOTAL –7541
Revenue Difference Compared to Balanced Loading	COMSAT	–$2.19M	–$10.46M	–$11.8M	–$12.78M	–$23.21M	–$35.48M	–$95.92M
	INTELSAT	–$1.61M	–$7.70M	–$8.68M	–$9.40M	–$17.08M	–$26.11M	–$70.58M

APPENDIX 2

Analysis of Effect of Loading Methodologies on Requirements for Satellite Circuits

Our analysis takes as a starting point the approximately $165 million Comsat projects as its total revenue requirements for INTELSAT space segment capacity during the mid-1985 to mid-1986 period in its Tariff Transmittal No. 656 filed on June 5, 1985.[39] We first determined the percentage of the $165 million total space segment revenue requirements which should be attributed to the space segment used to provide international satellite voice circuits to be 83.47 percent.[40] We then isolated the portion of Comsat's total space segment revenue requirements attributable to satellite circuits leased by AT&T to provide U.S.-CEPT message telephone service. We found that approximately 42.44 percent of all IMTS voice circuits leased by Comsat are to AT&T for U.S.-CEPT IMTS. Multiplying these two percentages together we calculated that 35.42 percent of the $165 million total space segment revenue requirements (or $58,443,000) should be attributed to satellite circuits used by AT&T to provide U.S.-CEPT message telephone services.[41]

In order to determine the effect of the three loading methodologies on Comsat's monthly per circuit space segment rate throughout the 1986-1991 period, we multiplied Comsat's total space segment revenue requirements for each year by 35.42 percent and divided the result by the number of satellite circuits years, AT&T would use under each methodology and then divided that annual figure by 12. Because we do not have detailed projections of Comsat's total space segment revenue requirements for any year other than mid-1985 through mid-1986, we performed this calculation using a range of assumed total revenue requirements. As a lower limit, we assumed that Comsat's total space segment revenue requirements would remain fixed at the $165 million level set forth in Tariff Transmittal 565 throughout the 1986-1991 period. As an upper limit, we assumed that Comsat's total space segment revenue requirements would increase at a rate of $20 million per year from the 1986 level of $165 million. We also performed the analysis for assumptions of $10 million and $15 million annual

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[39] Our use of information from this tariff filing should not be construed as a decision on the merits of that filing.

[40] We derived this percentage by multiplying the 17,523 voice circuits Comsat projects in Tariff Transmittal No. 565 it will have in service at year-end 1985 by Comsat's current annual charge for the space segment of a satellite voice circuit ($665 × 12) and dividing the result by the $165 million total revenue space segment revenue requirement. This results in 83.47 percent of Comsat's $165 million total space segment revenue requirement being attributed to the provision of satellite voice circuits.

[41] In order to isolate the percentage of Comsat's total space segment revenue requirements attributable to AT&T's use of satellite voice circuits for the provision of U.S.-CEPT message telephone service, we divided the number of satellite voice circuits so used by AT&T at the end of 1984 by the total number of satellite voice circuits Comsat provided to all areas of the world at the end of 1986. This calculation indicated that 42.44 percent of all satellite voice circuits used by U.S. carriers at year-end 1984 were used by AT&T for the provision of U.S.-CEPT message telephone service. Thus, we determined that percent of Comsat's total space segment revenue requirements attributable to AT&T's use of satellite circuits to provide U.S.-CEPT message telephone service to be:

$$X = (17{,}523 \times \$655 \times 12/165{,}000{,}000) \times .4244$$
$$X = .8347 \times .4244$$
$$X = .3542$$

increase in Comsat's total space segment revenue requirements. Table 1 displays the total space segment revenue requirements investigated for each year during the 1986-1991 period, the satellite circuit-years used in our calculations for each of the loading methodologies, and the resulting Comsat monthly per circuit revenue requirements derived. Table 2 displays the Comsat monthly per circuit space segment rates for each of the three loading methodologies resulting from each Comsat total space segment revenue requirement assumption as well as the average monthly per circuit revenue requirement over the six year period for each of the loading methodologies.[42]

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[42] We wish to emphasize that, while we believe that this analysis is a valuable indicator of the trends in per circuit revenue requirements adoption of each of these circuit distribution methodologies would produce, the analysis should not be taken as an accurate predictor of specific per circuit revenue requirements for satellite circuits in a given year. The lack of specific information on Comsat's total space segment revenue requirements for the 1987-1991 period required us to examine a range of assumptions concerning Comsat's total space segment revenue requirements. While we believe it is reasonable to assume that Comsat's actual total space segment revenue requirements are likely to fall within this range, given factors such as the timetables for procurement of satellites and the launch of satellites during this period, it is not likely that Comsat's total space segment revenue requirements will vary as linearly as they do under our assumptions. It must also be noted that our analysis isolates the Comsat's per circuit revenue requirements for U.S.-CEPT message telephone service. This was done in recognition of the potential that the ongoing planning proceedings for Pacific and Caribbean/South America facilities could result in circuit distribution guidelines which differ from those adopted for the North Atlantic region. Thus, actual per circuit revenue requirements in a given year could vary from those projected by our analysis.

TABLE 1

Calculation of Comsat Monthly Per Circuit Revenue Requirements

Year	Total Space Segment Revenue Requirement	Balance Loading		2 Percent		AT&T 3 Percent	
		Circuit Years	Per-Circuit Revenue Requirement	Circuit Years	Per-Circuit Revenue Requirement	Circuit Years	Per-Circuit Revenue Requirement
1986	165M	8103	601	8014	608	7930.5	614
1987	165M	9497.5	513	8943.5	545	8675	561
	175		544		578		596
	180		559		594		613
	185		575		611		630
1988	165	10365	470	9939.5	490	9437.5	516
	185		527		549		579
	195		555		579		610
	205		584		609		641
1989	165	11290	431	11129	438	10285.5	474
	195		510		517		560
	210		549		557		603
	225		588		597		646
1990	165	13433.5	333	12446	391	10844	449
	205		451		486		558
	225		494		534		613
	245		538		581		667

Calculation of Comsat Monthly Per Circuit Revenue Requirements

	Total Space Segment Revenue Requirement	Balance Loading		2 Percent		AT&T 3 Percent	
Year		Circuit Years	Per-Circuit Revenue Requirement	Circuit Years	Per-Circuit Revenue Requirement	Circuit Years	Per-Circuit Revenue Requirement
1991	165	16362.5	298	13883.5	351	11210	435
	215		388		457		566
	240		433		510		632
	265		478		563		698

TABLE 2

Comsat Monthly Circuit Revenue Requirements Comparison

	Annual Revenue Requirements Increase From $165M in 1986											
	$165M + 0/Year			$165M + $10M/Year			$165M + $15M/Year			$165M + $20M/Year		
	BL	2%	AT&T	BL	2%	AT&T	BL	2%	AT&T	BL	2%	AT&T
1986	601	608	614	601	608	614	601	608	614	601	608	614
87	513	545	561	544	578	596	559	594	613	575	611	630
88	470	490	516	527	549	579	555	579	610	584	609	641
89	431	438	474	510	517	560	549	557	603	588	597	646
90	363	391	449	451	486	558	494	534	613	538	581	667
91	298	351	435	388	457	566	433	510	632	478	563	698
Total	2676	2823	3049	3021	3195	3473	3191	3382	3685	3364	3569	3896
Average Monthly Revenue Require. Per Ckt.	446	471	508	504	533	579	532	564	614	561	595	649
% Diff. Compared to Balanced Loading	–	+5.61	+13.90	–	+5.75	+14.88	–	+6.02	+15.41	–	+6.06	+15.69
1986-88 Sub Total	1584	1643	1691	1672	1735	1789	1715	1781	1837	1760	1828	1885
Average Monthly Revenue Require. Per Ckt.	528	548	564	557	578	596	572	594	612	587	609	628
% Diff. Compared to Balanced Loading	–	+3.72	+6.76	–	+3.76	+6.99	–	+3.84	+7.11	–	+3.86	+7.10

Common Carrier
International Satellite Systems

> Commission issued a *Report and Order* regarding the establishment of satellite systems which would provide international communications services and *Memoranda Opinions, Orders and Authorizations* of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issued *Memoranda Opinions and Orders* regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.
> —*Orion Satellite Corp.*

FCC 85-402

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of the Application of Orion Satellite Corporation For authority to construct, launch and operate an international communications satellite system consisting of two in-orbit satellites and one ground spare.	File No. CSS-83-002-P

MEMORANDUM OPINION AND ORDER

Adopted: July 25, 1985; Released: September 3, 1985

BY THE COMMISSION:

1. The Commission has under consideration the captioned application, filed by the Orion Satellite Corporation (Orion) on March 11, 1983, seeking authority pursuant to Sections 303(g), 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 303-319 (1976), to construct, launch and operate a private international telecommunications satellite system. Orion filed on July 8, 1983 both an amendment to its application and a request that the Commission advance publish its requested orbital positions with the International Frequency Registration Board (IFRB).

2. The application was placed on public notice on March 16, 1983. A petition to deny the application was filed by the Communications Satellite Corporation (Comsat). Comments were filed by AT&T Communications, Inc. (AT&T), RCA Global Communications, Inc. (RCA Globcom), and Home Box Office, Inc. (HBO); Orion filed a consolidated reply to these comments. Other responsive pleadings were filed by Comsat, the United States Departments of State and Commerce, the Defense Communications Agency, CBS, Inc. (CBS), the Bank of America, International Satellite, Inc. (ISI), and Philip Trezise and Dale Hatfield Associates, Inc. for Orion. Letters addressed to the Commission from various members of the United States Congress were also made part of the record as were letters from signatories to INTELSAT.[1]

I. The Application

3. Orion, a newly-formed Delaware corporation, proposes to establish a private international satellite facility that would link the eastern portion of North America with Western Europe. Orion will sell or lease transponder capacity on a non-tariffed basis to users on both sides of the Atlantic. The satellites are designed to provide video, data and audio transmission services, in particular, full- and half-transponder FM-TV transmissions. In addition, FDM-FM, FDMA-FDM-FM and digital services will be available. The satellites will also carry single-channel-per-carrier analog and digital traffic. The video services will consist of both full-frame, full-speed video and compressed teleconferencing capabilities, such as at 1.544 Mb/s. The satellite will accommodate experimental/developmental/operational high-definition television programming. A variety of analog services, including radio program material, analog and analog/spread spectrum low bit rate data and facsimile, will also be provided to the users. Each satellite's capacity may exceed the equivalent of 20,000 voice half-circuits, 22 full-rate video signals or 1.4 Gb/s of data signals.

4. The proposed system will be positioned in the mid-Atlantic region of the geostationary-satellite orbit at 37.5 degrees and 50 degrees West Longitude and, if necessary, the ground spare could be launched to either position. Each satellite will carry 22 transponders operating in the Ku band, providing 36 MHz usable bandwidth coverage per transponder directed by spot beams to the eastern portion of North America and the western portion of Europe. The satellites will transmit and receive in the 14/11 GHz frequency band. Further, the satellites will have a 7 1/2-year mission life and a 10-year design life and will have sufficient fuel capacity for removal from the geosynchronous orbit upon completion of their missions. The satellites will also have normal redundancy equipment and

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[1] *See* Appendix A for a list of signatories who have submitted correspondence to the Commission.

telemetry, tracking and control (TT&C) subsystems to monitor and control the spacecraft at all times. The on-ground satellite system will be staffed on a 24-hour basis and will have fully redundant equipment and be responsible for monitoring contact with each spacecraft. Orion states that the orbital locations were selected based on convenience of access by users, and that the satellite positions meet both the Commission's two-degree spacing requirement and INTELSAT's *de facto* three-degree spacing standard. Orion further notes that the positions allow full frequency reuse for the Southern Hemisphere by other facilities in the same orbital slot. Orion states that although a launch service agreement has neither been negotiated nor entered into with any launch contractor, NASA has indicated that the possible launch dates of December, 1986 and March, 1987 are available.

5. Orion estimates the total projected cost of the proposed system to be $229.75 million in 1983 dollars, the costs divided among three satellites, estimated at approximately $45 million each, two launches at approximately $30 million each, launch insurance at approximately $10 million, and ground segment costs, including TT&C station and network control facilities, estimated at approximately $10 million. Orion estimates its operational costs, inclusive of preoperative and administrative costs, at $14.75 million. Orion states that it will obtain the funds necessary to meet the estimated capital requirements through equity investments, long-term debt financing, transponder sales or a combination thereof.[2]

6. Orion states that its proposal is in the public interest because its system would meet the need for privately operated international communications facilities. Such facilities, avers Orion, will provide a vital complement to the existing international system by allowing users to make long-term plans with price and supply assurances and to make tailored and flexible arrangements according to their particular needs. Orion states that the Commission has determined that the sale or long-term lease of satellites is not a common carrier offering and has allowed privately held satellite facilities in the domestic market for years, finding transponder sale activities to be a positive development in the domestic communications market.

7. Orion contends that its proposal is fully consistent with the Communications Satellite Act of 1962, as amended, 47 U.S.C. Sections 701-744 (1976), and that the statute contemplates the creation of an additional satellite system. Section 102(d) of the Act provides that it is not the intent of the statute to preclude the establishment of an additional communications satellite system when one is required by the national interest.

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[2] Orion includes with its application letters indicating interest in assisting Orion in funding its Orion's project from Guiness Mahon & Company, PNC Merchant Banking Company, and The Centennial Fund.

Further, Section 201(a)(6) of the Act provides that the President shall allow the use of a separate satellite system when required by the national interest. Moreover, Orion states that the Commission found in its *Transborder Satellite Video Services* order that the Satellite Act and its legislative history clearly recognize the possibility of an alternative satellite system to provide communications satellite services between the United States and other nations.[3] Finally, Orion states that its proposal is fully consistent with the INTELSAT Agreement in that the Agreement recognizes the use of non-INTELSAT facilities and has procedures in Article XIV of the Agreement to coordinate these separate facilities with the INTELSAT system. Orion avers that it is not proposing to offer "public" telecommunications services as defined by Article I(k) of the Agreement since it will not be engaged in any common carriage activity. Thus, argues Orion, the application should, at most, be subject only to the technical coordination requirements of Article XIV(e) of the Agreement which governs the use of non-INTELSAT systems for "specialized" communications services. Orion states that should the Article XIV(d) technical and economic coordination be found necessary, its proposed system would satisfy this test. Additionally, Orion contends that should Article XIV(d) control the determination of whether Orion meets coordination requirements properly belongs to INTELSAT subsequent to, and separate from, the Commission's grant of authority under the Communications Act of 1962.

II. The Pleadings

8. Comsat, in its petition to deny, argues that grant of Orion's application would be inconsistent with the United States' commitment to the INTELSAT system as embodied in the Communications Satellite Act of 1962 and reaffirmed in the Commission's *Transborder Satellite Video Services* order, *supra,* note 2. Comsat states that Orion's application can be distinguished from those before the Commission in the *Transborder* case in that the latter involved the provision of very limited service that would not otherwise have been provided through the INTELSAT system because of extreme operational difficulty and expense. Comsat further states that the application does not meet the standard set forth in Section 102(d) of the Act, and made applicable to this case by the *Transborder* decision, which requires that the proposed additional system "meet unique governmental needs" or be "required in the national interest." 47 U.S.C. Section 701(d). In addition, Comsat states that a departure from the established national policy is not warranted since such a change would: (1) produce significant economic harm to INTELSAT; (2) encourage other

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[3] Transborder Satellite Video Services, 88 FCC 2d 258 (1981) (hereinafter referred to as "*Transborder*").

countries to establish their own long-haul, high density intercontinental satellite system; (3) diminish the U.S. leadership role in INTELSAT and reduce U.S. credibility as a strong proponent of INTELSAT; (4) be perceived as promoting inefficient use of orbital slots and frequency spectrum and as repudiating prior U.S. efforts to promote conservation of these resources internationally; and (5) compromise U.S. efforts to discourage adoption of planned assignments of orbital slots and frequency spectrum at the 1985 and 1988 Space WARCs.

9. Comsat also disagrees with Orion's characterization of its proposal as "specialized" services and claims that given the definitions of "public" and "specialized" telecommunications services in Articles I(k) and (i), respectively, of the INTELSAT Agreement, the fixed-satellite services proposed by Orion are public services because the foreign end of the network would operate through public PTT facilities. Thus, argues Comsat, should the Commission grant the application, Orion must engage in Article XIV(d) consultation with INTELSAT "to ensure technical compatibility of such facilities" with the INTELSAT system and "to avoid significant economic harm to INTELSAT." Finally, Comsat states that Orion's argument that the Commission may leave it to INTELSAT to determine whether its application meets the Article XIV(d) requirements should be rejected as the Commission itself must satisfy such requirements prior to any grant of conditional authorization.

10. AT&T requests that, in case Orion's application is granted, the Commission clearly state that should Orion's projected market not develop as expected, the Commission will not entertain any request by Orion to compel common carriers to use any spare capacity in its system.[4]

11. In addition to these pleadings, the Commission has received many letters from foreign signatories to INTELSAT expressing concern that possible changes in United States policy regarding competing international satellite systems would not be consistent with the United States' legal commitments to INTELSAT. Generally, these letters claim that the competing systems propose to concentrate their services in the high traffic routes in the North Atlantic Basin and, in effect, receive high earnings while meeting the requirements of a small number of large

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[4] ISI and Orion move to strike the comments of both Philip Trezise and the firm of Wiley & Rein as they fail to comply with the procedural requirements of Section 309(d)(1) of the Communications Act of 1934 regarding the submission of documents to the Commission by parties in interest. ISI and Orion state that both sets of comments were at least indirectly funded by INTELSAT whose members, including Comsat, have expressed opposition to the pending applications for private satellite systems and that such submissions were made without disclosing the work had been subsidized by an interested party. ISI and Orion further argue that both filings must be rejected as informal objections as they fail to meet the minimal requirements of setting forth specific factual allegations with respect to any of the proposals for private satellite systems.

users. For INTELSAT, it is argued, this would result in the loss of large traffic trunks and would significantly reduce the revenues available to meet its capital investment requirements and hold down rates throughout the world. Such a change in U.S. policy would negatively impact all users of INTELSAT, in particular, the people in small and developing countries. Also expressed is the concern that United States' approval of any of the pending applications would lead to a proliferation of other U.S. satellite systems intending to carry public international telecommunications traffic in direct competition with INTELSAT which, in turn, would encourage other INTELSAT members to make similar authorizations for separate systems.

12. In its opposition to Comsat's petition to deny, Orion states that its proposal should be characterized as a "private" or "specialized," not "public," offering. Orion states that the Commission has traditionally maintained a clear distinction between communications services available for private use and those available for the provision of service by common carrier, and has allowed consumers to choose between them. Orion also maintains that its proposal is governed by Article XIV(e), not Article XIV(d), of the INTELSAT Agreement because it is offering private facilities rather than public telecommunications services. Orion argues that "public telecommunications services" are to be read as common carrier services as demonstrated by the legislative history and background of the INTELSAT Agreement, by the definition of comparable terminology used in international telecommunications regulatory parlance, and by the legislative history and language of the Satellite Act and related statutes and judicial interpretations thereof. Finally, Orion argues that, contrary to Comsat's charge, its application is not governed by the standard established in the Commission's *Transborder* decision. Orion states that positing the *Transborder* standard as coextensive with the Section 102(d) statutory standard would render meaningless those portions of Article XIV which govern coordination of non-INTELSAT systems designed for purposes other than international public telecommunications services, in particular, Article XIV(e). In response to AT&T's proposed condition, Orion cannot imagine any circumstances under which it would propose that common carriers be compelled to use its capacity.

III. Discussion

13. Orion's application is one of six applications that have been filed to construct and operate international satellite systems separate from INTELSAT. At the request of the Departments of State and Commerce, the Commission has refrained from taking final action on any applications until such time as the Executive branch could analyze the applications'

impact on the national interest and foreign policy of the United States.[5] On November 28, 1984, President Reagan signed a Presidential determination that separate satellite systems are "required in the national interest" within the meaning of Sections 102(d) and 201(a) of the Communications Satellite Act of 1962, subject to certain limitations.[6] The Departments of State and Commerce, at the direction of the President, jointly informed the Commission of the Presidential determination and the criteria necessary to ensure that the United States meets its international obligations.[7] The limitations set forth by the Executive branch require, first, that each system be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public-switched message networks (except for emergency restoration services), and, second, that one or more foreign authorities authorize the use of the proposed system and enter into consultation procedures with the United States under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm.

14. The Presidential determination satisfies the requirement for a threshold finding under the Communications Satellite Act that the proposed separate systems are "required in the national interest." The Presidential determination, however, is a general policy decision and is not intended to decide which, if any, applications now before the Commission should be granted. Therefore, the Commission's task is to establish a policy for regulatory consideration of the applications and to determine whether any of the proposed systems should be licensed under the public interest standard of the Communications Act of 1934 consistent with the Presidential determination.

15. We initiated an inquiry and rulemaking in CC Docket No. 84-1299 to solicit data and analyses regarding issues that have arisen in connection with the applications.[8] In that proceeding, we considered the potential public benefits of authorizing the proposed systems, the economic impact of separate systems on INTELSAT and their effect on consumer service providers and equipment manufacturers. In addition, we

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[5] Letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, and Diana Lady Dougan, Coordinator, International Communications and Information Policy, to Chairman Fowler, in FCC File No. CSS-83-002-P (April 6, 1983); letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, to Chairman Fowler (August 26, 1983).

[6] Presidential Determination 85-2, filed in CC Docket No. 84-1299 (November 28, 1984).

[7] Letter from George P. Schultz, Secretary of State, and Malcolm Baldridge, Secretary of Commerce, to Chairman Fowler, in CC Docket No. 84-1299, dated November 28, 1984.

[8] Establishment of Satellite Systems providing International Communications, Notice of Inquiry and Proposed Rulemaking, 50 Fed. Reg. 1570 (released January 4, 1985) (hereinafter referred to as the "*Separate Systems*" Notice).

considered legal, technical and other policy issues that must be taken into account in considering the applications. Further, from a regulatory perspective, we considered unresolved questions concerning the scope and applicability of the Executive branch's service limitations.

16. In our *Separate Systems* decision in CC Docket No. 84-1299, we have today concluded that the establishment of separate satellite systems will result in substantial benefits to users of international satellite communications services.[9] Separate systems will provide currently unavailable service enhancements to users with special communications needs, and will stimulate technological innovation and services development, improve network efficiencies, reduce user-costs, and contribute to the creation of new business and trade opportunities. We have further concluded that authorization of separate satellites subject to the Executive branch limitations provides reasonable assurance that INTELSAT will avoid significant economic harm from the entry of new suppliers. In reaching these conclusions, we have addressed and resolved issues which were raised in response to Orion's and the other applications. We thus find it unnecessary to address these same issues in this order. Here, we will determine whether Orion's application is consistent with the Executive branch limitations, whether the applicant has the requisite legal, financial and technical qualifications under Title III of the Communication's Act, and whether grant of the application otherwise satisfies the public interest standard of the Communications Act. We will also address any outstanding issues particular to this application. We believe that our decision here, along with our decision in Docket No. 84-1299, adopted today, is fully dispositive of all issues and arguments raised with respect to Orion's application.

Consistency With Executive Branch Service Restrictions

17. As we have discussed in our *Separate Systems* decision, the purpose of the Executive branch restrictions is to avoid significant economic harm to INTELSAT. Through these service limitations, INTELSAT's "core" revenues obtained from supplying space segment capacity for international switched-message services would be protected from diversion by new suppliers. According to the Executive branch restrictions, Separate systems are to be "... restricted to providing services through the sale or long-term lease of transponder or space segment capacity for communications not interconnected with the public switched-message networks." However, we found it necessary in our *Separate Systems* decision to clarify and further develop the restrictions to assure that they are understood by all parties and can be implemented from a regulatory standpoint.

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[9] Separate Systems, Report and Order, FCC 85-399, released 9-3-85.

18. We have determined that no communications provided over separate satellite system space segment capacity may interconnect with public switched facilities of international common carriers to provide switched-message services such as MTS, telex, TWX, telegraph, teletext facsimile and high speed switched data services. In addition, we decided to apply the "no interconnection" and "sale and long-term lease" restrictions not only to separate system operators, but also to all levels of users of the facilities. Further, in view of the "sale and long-term lease" requirement, separate system licensees may not operate as common carriers. Finally, we have determined the following: (1) there is no need to establish a minimum unit of space segment capacity which a separate systems must provide; (2) the minimum lease period for the "long-term lease" of capacity is to be one year; (3) space segment capacity may be obtained and resold by common carriers and enhanced service providers to provide communications services not interconnected with any public switched message network; and (4) there is no basis to establish a "sunset" date for the Executive branch service restrictions absent a finding from the Executive branch that they are no longer necessary to fulfill U.S. international obligations.

19. Orion's proposal is consistent with the Executive branch restrictions. Orion proposes to offer space segment capacity on a non-tariffed basis through either sale or long-term lease. Orion does not propose to permit interconnection of its facilities with public switched facilities. Common carriers and enhanced service providers may obtain and resell Orion's space segment capacity to provide services not interconnected with public switched message networks. All the restrictions concerning interconnection and "sale and long-term lease" practices apply not only to Orion but to all levels of users of its facilities.

Legal Qualifications

20. Orion has submitted the Common Carrier and Satellite Radio Licensee Qualifications Report (FCC Form 430). Orion was incorporated in Delaware in December 1982. Its thirteen largest shareholders include Thomas McKnight (15 percent), President and Board Member of Orion and a telecommunications consultant; Christopher Vizas, II (15 percent), Vice President, Secretary, Treasurer and Board Member of Orion and a telecommunications consultant, and The Centennial Fund, Ltd., (9.8 percent), which specializes in venture capital. Thirteen individuals comprise the remaining ownership of the corporation. Orion does not currently have any applications pending before the Commission. On the basis of the FCC Form 430 and attendant documents submitted to the Commission by Orion, we find that Orion has the requisite legal qualifications to own and operate an international satellite system.

Financial Qualifications

21. In assessing an applicant's ability to construct, launch and operate an international satellite system, we must consider the applicant's financial competence or qualifications. We determined in our *Separate Systems* decision that an applicant must demonstrate its financial preparedness to assume the costs and liabilities involved in constructing, launching and operating the proposed system for one year. The applicant must show its current financial ability to meet the costs and expenses of planning, constructing, launching and operating its proposed system.[10] However, in view of the fact that the applicant must undergo the INTELSAT consultation process, and due to the resulting uncertain status of the application pending this process, the applicant is unlikely to receive firm financial commitments. Therefore, we decided in our *Separate Systems* order to consider the financial qualifications of applicants in two stages.

22. In the first stage, Orion must demonstrate: (1) the estimated costs of proposed construction and launch, and any other initial expenses for the proposed space station(s); (2) the estimated operating expenses for one year after launch of the proposed space station(s); and (3) the source(s) or potential source(s) of funding of the proposed system for one year, which would include the identity of financers and their letters of financial interest. For applicants which meet these minimal criteria, we will issue a construction permit setting forth the approved technical parameters of the proposed system for purposes of INTELSAT technical coordination under Article XIV(d). No later than 60 days after the Commission has been informed by the Department of State that the United States has fulfilled its Article XIV(d) obligations and the Commission may begin final authorization of Orion's proposed system. Orion must additionally meet the following second stage criterion to be given permission to begin construction: Orion's current financial ability to meet the costs of construction and launch, and operating expenses for one year after launch.[11]

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[10] The financial qualifications required for obtaining a license are in addition to the various requisites of the application process, specifically the limitations prescribed by the Presidential determination, the INTELSAT Article XIV(d) consultation process, and a finding by the Department of State that the United States has fulfilled its obligations under the INTELSAT charter and that the applicant has satisfied the Title III public interest requirements pursuant to the Communications Act of 1934.

[11] A demonstration of current financial ability to meet such costs and expenses would include the submission of a balance sheet, verified by affidavit, current for the latest fiscal year and documentation of any financial commitments reflected in the balance sheet together with an exhibit demonstrating that the applicant has current assets and operating income sufficient to meet its estimated construction launch and operation costs and expenses. For newly established entities unable to submit a current balance sheet,

23. Orion has sufficiently demonstrated that it is financially qualified to obtain a conditional construction permit. First, Orion has estimated the capital costs of its system at approximately $215 million in 1983 dollars. These costs are comprised of $135 million for three spacecraft, $60 million for two launches, $10 million for insurance and $10 million for the ground segment (including TT&C station and network control facilities). Orion has also estimated preoperational costs at $15 million. Second, Orion indicates that it expects to obtain the funds necessary to meet its capital requirements from a combination of equity investments, long-term debt financing and transponder sales. It included with its application letters from three underwriters and financial institutions stating that the necessary funds could be raised within a reasonable period of time.[12] As provided in the procedures established in our *Separate Systems* decision, Orion must meet this requirement no later than sixty days following the receipt by the Commission of the State Department's letter stating that the United States has fulfilled its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system. At that time, we will issue an order permitting Orion to begin construction providing Orion has met all other requirements set forth in this order. Should the conditions of the second stage not be timely satisfied, or untimely satisfied without good cause shown, the conditional construction permit will become null and void and the orbital locations tentatively assigned to Orion will become available for reassignment. Once either the conditional construction permit or Commission order permitting construction by the applicant is issued, Orion bears all risks and liabilities in commencing construction of its satellite system pending final Commission issuance of launch authority and a license to begin operation.

Technical Qualifications

24. Three aspects of the technical proposal in Orion's application cause us concern: (1) Orion's failure to adequately address the impact of the power flux-density limits of the International Radio Regulations on its proposed operations; (2) its failure to design its system for frequency reuse by each of its two beams (simultaneous use of all frequencies in

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these applicants shall submit an exhibit indicating the estimated income or revenues anticipated from the proposed operation of the satellite system necessary to meet the estimated costs of construction, launch and operation along with any additional information requested by the Commission. Such additional information could include scheduled debt financing or stock issues, established lines of credit or other forms of internal financing. If the applicant is owned by more than one corporate parent, it must submit evidence of a commitment to the proposed satellite program by management of the corporate parent upon whom it is relying for financial resources.

[12] *See* Application of Orion, Appendix E, letters from the Centennial Fund, PNC Merchant Banking Company and Guiness Mahon Incorporated.

both beams); and (3) its failure to design its system to be able to use at least 860 MHz of a 1000 MHz (with polarization reuse) frequency assignment.

25. With respect to compliance with the power flux-density (PFD) limits of the International Radio Regulations, Orion includes a table on page II-32 of its application which indicates the on-axis EIRP (equivalent isotropically radiated power) of its proposed satellites. The table indicates that the on-axis EIRP will be 51.72 dBW for the satellites' European beams. The PFD at the horizon of the Earth's surface, under assumed free-space conditions (the reference conditions specified in the Radio Regulations), can then be calculated to be approximately –150.8 dB(W/m^2/4kHz). Orion's London downlink budget on page II-39 verifies this calculation (after allowing for 39.5 dB of signal spreading and adding back in the off-axis loss which is not appropriate to the PFD-limit calculations in this case).

26. Since, as indicated by Orion, the centers of the Orion satellites' European beams, at two of Orion's proposed orbital positions, would point at the earth's horizon, the angle of arrival relevant to the PFD limits of the Radio Regulation is 0°. This means that there would only be a 0.8 dB margin between the calculated PFD of –150.8 dB(W/m^2/4kHz) and the relevant PFD limit of –150 dB(W/m^2/4kHz) in the 10.95 –11.70 GHz band. Moreover, the calculated PFD for the Orion satellites assumes that the transponder power would be distributed perfectly evenly across the entire transponder bandwidth. Since, in practice, this cannot be the case, the only recourse would be to lower the transponder power delivered to the European beam. Our analysis of the application and information supplied by Orion for international coordination indicates that we can expect that in some cases the transponder power for the European beam would be limited to less than 2 watts.

27. There is also a question as to whether Orion has made an appropriate choice of facilities to provide its proposed services. Our analyses indicate that there would be no occasion for which it would be permissible for Orion to combine two TWT amplifiers on a single transponder to provide the higher power service it has proposed for its European service area. In fact, it is not clear that Orion would ever be permitted to use the full capabilities of even the 20-watt amplifiers it has proposed for its satellites' European beams. Although the situation is somewhat better for the Orion satellites' North American beams, it still appears that the satellite transponders could not be operated at full power in that case either. It is also not clear that the transponder power could be divided between Orion's North American and European beams in a fashion that would allow for the use of the amplifiers' full capability.

28. With respect to full frequency reuse, the Commission has a longstanding policy of requiring the greatest efficiency practicable in the satellite systems it authorizes. Although Orion has proposed to provide for frequency reuse by means of cross polarization in its uplink and downlink bands, we are concerned that its proposed system does not provide for reuse of frequencies and polarizations in each beam by means of space station antenna discrimination. Orion's proposed satellites could be active on the same frequency in both downlink beams at the same time, but only with the same signal. Therefore, half of the uplink capacity (e.g., half the assigned spectrum in each beam or all of the assigned spectrum in one beam) would go unused at any given time, and the "throughput" of the satellites would be only half of what could be achieved by doubling the number of amplifiers and using the full capacity of both beams in both directions at once. As we have found in our *Separate Systems* decision, we believe, absent a showing to the contrary, that frequency and polarization reuse in each beam should be employed to provide four-times reuse in cases where two beams serve areas sufficiently divergent to allow for the necessary antenna discrimination.

29. Finally, Orion has proposed a transponder plan which would use only 792 MHz of a 1000 MHz (cross polarized) assignment. In our *Separate Systems* decision we have set forth a requirement that at least 860 MHz of a 1000 MHz assignment be used. We will expect Orion to meet this requirement.

30. For these reasons, we are not issuing a conditional construction permit at this time although Orion satisfies the legal and minimal financial requirement and its proposal is consistent with Executive branch policy. We are giving Orion an opportunity to clarify or modify its application to respond to our concerns. Orion may either explain why our analyses and policies should not be applied in its case, or else it must modify its application to meet our concerns.

Other Issues

31. With regard to AT&T's request that the Commission clearly state that it shall disregard any requests of Orion to compel common carriers to use spare capacity in its system should its application be granted, we find such a request unwarranted by the present circumstances. We agree that Orion should not be guaranteed any market share or services. We conditionally authorize a qualified applicant's proposed system without any guarantee of traffic from U.S. international common carriers or other sources. It shall be this Commission's policy that any such private systems succeed or fail on their own merits and not through Commission action that would guarantee common carrier use of the systems. At the same time, we determined in our *Separate Systems* decision not to prohibit

common carrier use of the system and will consider any proposed common carrier purchase of capacity in the context of our normal facility planning and authorization procedures. We took this approach in authorizing private international submarine cable systems.[13]

32. With regard to Comsat's petition to deny Orion's application, we find on the basis of the record compiled both in this file and in the *Separate Systems* docket that Comsat presents no factual allegations to show that grant of Orion's application would be inconsistent with the public interest, convenience and necessity under Section 309(a) of the Communications Act of 1934. Therefore, pursuant to Section 309(d) of the Communications Act and Section 63.52(c) of the Commission's rules, we deny the petition to deny filed by Comsat.

33. With regard to Orion's and ISI's motion to strike comments filed by Philip Trezise and the firm Wiley & Rein, we find that such remarks cannot be barred based on a mere suspicion that entities other than those submitting the remarks were or are undisclosed parties in interest under Section 309(d)(1) of the Communications Act. While Orion and ISI have raised concern as to the nature and extent of INTELSAT's relationship with Trezise and Wiley, Johnson, we hesitate to rely upon the newspaper articles cited by ISI as sufficient demonstration of INTELSAT's undisclosed interest in this proceeding. As to Orion's and ISI's request that the Commission reject these same comments as informal objections, we find that while the comments at issue do not set forth specific allegations regarding any of the pending separate satellite system applications, they do generally address matters raised by these applications. We conclude, therefore, that the Commission's desire to compile a complete and comprehensive record regarding issues as novel as those presented here will best be served by accepting for filing the remarks of Trezise and Wiley & Rein. We do not believe that either ISI or Orion or any other separate satellite systems application will be prejudiced by our decision.

Public Benefits

34. On the basis of our analyses in the *Separate Systems* decision, we have found that, with respect to the type of information transmitted, the services now offered or planned by INTELSAT are generally comparable to those proposed by Orion, such as video, audio and data transmission services. We have also found several crucial differences between Orion's proposed services and the services offered or planned by INTELSAT. First, with regard to satellite downlink power, we find that INTELSAT, as a general matter, cannot equal Orion in achieving combinations of earth station size, transmission rates, connectivity user control, security and costs that may be described by a user with special needs. Second, with

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[13] *See* Tel-Optik Limited, *et al*, FCC 85-99, (released April 5, 1985).

regard to coverage and connectivity of satellites providing customer-premise services, we find that Orion's network far exceeds that of INTELSAT. Third, Orion proposes to both sell and lease its space segment capacity, whereas INTELSAT, which is permitted to sell its transponder capacity, only leases it. Orion's proposal will provide international users with the same benefits that domestic users have enjoyed as a result of the Commission's Domestic Transponder decision.[14] Private sale of space segment capacity will: (1) permit the providers of capacity to make tailored and flexible arrangements with customers that are not possible under the regimen of a tariffed service offering; (2) enable customers to make long-term plans for the use of facilities with assurance as to facility availability and price; (3) permit systems to be specifically designed to customer needs; and (4) result in positive market development for new and innovative service offerings. We found in our *Separate Systems* decision, as we did in our decision authorizing private submarine cable facilities,[15] that users with bulk capacity needs for special service requirements for international services should enjoy the same benefits.

35. We believe that authorization of Orion's proposed separate system would provide those benefits to users of international satellite communications services that we have found in our *Separate Systems* decision will result from authorization of separate systems. Orion would provide currently unavailable service enhancements to users with special communications needs, stimulate technology and service development and user-costs. In addition, Orion's proposed system would offer to customers alternative suppliers to fulfill their special needs. We further believe that applying competitive pressure to INTELSAT within the limited service area outlined above will result in the further development of this market and encourage service innovation. Based on the fact that Orion would operate within the confines of the Executive branch restrictions, and in view of our findings in our *Separate Systems* decision, we find that Orion's proposed system will not cause significant economic harm.

36. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and (j), 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151-319 (1976), that Orion Satellite Corporation has forty-five days in which to file a modification or amendment to, or clarification of, its application in File No. CSS-84-002-P(LA) addressing the Commission's technical concerns discussed in paragraphs 25 through 30 above. Failure of Orion to submit such modification, amendment or clarification to the Commission within forty-five days will result in the dismissal of application File No. CSS-83-002-P without prejudice.

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[14] Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1251 (1982), *aff'd sub nom.* Wold Communications, Inc. v. FCC, 735 F.2d 1465 (D.C. Cir. 1984).

[15] Tel-Optik Limited, *et al.,* FCC 85-99 (released April 5, 1985).

37. IT IS FURTHER ORDERED that in the event a conditional authorization is issued, Orion shall provide the Commission with a demonstration of Orion's current financial ability to meet the costs of construction and launch as well as operating expenses for one year following launch. Orion shall file this information with the Commission no later than sixty days following receipt by the Commission of a letter from the Department of State informing the Commission that the United States has completed its Article XIV(d) obligations with respect to the proposed system and instructing the Commission that it may proceed with final authorization of the system. Should these conditions not be timely satisfied upon the expiration of the sixty-day period following receipt of the State Department's letter, unless extended by the Commission for good cause shown, any order permitting construction will become null and void.

38. IT IS FURTHER ORDERED that as a condition of this order, and in the event a conditional authorization is issued, Orion must file with the Commission copies of any operating agreements entered into by Orion within 30 days of execution.

39. IT IS FURTHER ORDERED that no final authorization for launch or operation of the proposed satellites shall be issued unless and until: (1) one or more foreign authorities authorize use of the system and enter into consultation procedures with the United States Party under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm; and (2) the Department of State informs the Commission that the United States has completed its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system.

40. IT IS FURTHER ORDERED that the petition to deny filed by Communications Satellite Corporation IS DENIED.

41. IT IS FURTHER ORDERED that the request of AT&T Communications, Inc. that the Commission clearly state herein that, should Orion's applications be granted, the Commission will not entertain any future request of Orion to compel common carriers to use its spare space segment capacity IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION

WILLIAM J. TRICARICO, *Secretary*

* See FCC 85-398, in this Volume, for Appendix A.

Common Carrier
International Satellite Systems

Commission issued a *Report and Order* regarding the establishment of satellite systems which would provide international communications services and *Memoranda Opinions, Orders and Authorizations* of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issued *Memoranda Opinions and Orders* regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.
—Pan American Satellite Corp.

FCC 85-398

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of the Application of Pan American Satellite Corporation For authority to construct, launch and operate a subregional Western Hemisphere satellite system consisting of two in-orbit satellites	File No. CSS-84-004-P(LA)

MEMORANDUM OPINION, ORDER AND AUTHORIZATION

Adopted: July 25, 1985; Released: September 3, 1985

BY THE COMMISSION:

1. The Commission has under consideration the captioned application, filed by Pan American Satellite Corporation (PanAmSat) on May 31, 1984, seeking authority pursuant to Sections 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 303-319 (1976) to construct, launch and operate a subregional Western Hemisphere satellite system. PanAmSat filed two technical amendments to its application on June 26, 1984 and November 6, 1984, respectively, a request that the Commission advance publish its requested orbital positions with the International Frequency Registration Board (IFRB) on June 26, 1984, and a modification and amendment to its application on January 11, 1985,

requesting authority to launch its ground spare satellite as a second in-orbit satellite at 45 degrees West Longitude.

2. The application was placed on public notice on June 13, 1984. Petitions to deny both the initial application and the January, 1985 modification and amendment were filed by the Communications Satellite Corporation (Comsat). Comments were filed by AT&T Communications, Inc. (AT&T), Digital Telesat, Inc. (Digisat), and Philip Trezise; PanAmSat filed a combined opposition to Comsat's motion to deny and consolidated reply to AT&T's and Digisat's comments. Other responsive pleadings were filed by Comsat, Cygnus Satellite Corporation (Cygnus), Philip Trezise, Rene Anselmo as Chairman of PanAmSat, International Satellite, Inc. (ISI), Orion Satellite Corporation (Orion), and the United States Departments of State and Commerce. Letters addressed to the Commission from various members of the United States Congress were also made part of the record as were letters from signatories to INTELSAT.

I. The Application

3. PanAmSat, a newly-formed Delaware corporation, proposes to establish a private international facility capable of providing domestic satellite service in Latin America and subregional video and audio distribution satellite service between New York and Miami on the one hand, and Latin American countries on the other. PanAmSat proposes to sell or lease transponder capacity on a selective, non-common carrier basis to television and radio networks, international news organizations, and private and governmental entities; such capacity will not be used for international switched services of either a private or public nature currently being provided by INTELSAT. The satellites are designed to provide video and radio programming, videotext and teletext, telex, facsimile, electronic mail and telephone service. PanAmSat intends to begin providing service in early 1985 by obtaining interim transborder capacity from other satellite carriers; PanAmSat's customers will move to the PanAmSat satellite shortly after its launch. PanAmSat estimates the demand for its Latin American domestic service to be for as many as forty-six transponders. No sales contracts have yet been entered into. Finally, PanAmSat will make available to the Organization de la Television Iberiamericana (OTI) transponder capacity without charge to facilitate the distribution of OTI special programs throughout the Western Hemisphere. Additional capacity will also be reserved for the exchange of educational programming and information among the universities of the Western Hemisphere without charge.

4. The system as originally proposed consisted of one in-orbit hybrid satellite located at 57 degrees West Longitude and one ground spare based on the high-powered Hughes HS-393 satellite design. PanAmSat subsequently amended its application to propose an additional in-orbit

satellite located at 45 degrees West Longitude in place of the previously proposed on-ground spare.[1] A complex double antenna structure will be employed to generate multiple beams. The satellites will have thirty-six transponders to provide coverage for subregional video and audio service of the Western United States and Caribbean region using one subcontinental beam and of the Latin American subregion using one continental beam. PanAmSat's Latin American domestic system will consist of twenty-four transponders for dedicated domestic service within South America operating at 3.7-4.2 GHz and 5.9-6.4 GHz. These transponders will be configured in three subcontinental beams and one moveable spot beam. Six transponders will be used in each of the four beam regions.[2] Transmissions will be uplinked from the continental beam for downlinking into the three subcontinental and moveable spot beams. This domestic system uses dual polarized frequencies. The Western Hemisphere video and audio distribution system will consist of twelve transponders, each with a bandwidth of 72 MHz. Six transponders will uplink video programming from New York and Miami at 6.4-6.9 GHz for downlinking into Latin America at 10.7-11.2 GHz in the continental beam. Six transponders will also permit programming to be uplinked from Latin American countries at 6.4-6.9 GHz for downlinking into New York and Miami at 10.7-11.2 GHz. This system uses dual polarized frequencies for full frequency reuse. The distribution of programming within the United States will occur over domestic satellites such as those of the Galaxy and Spacenet systems. The satellites will have a ten-year mission life. The power communications and altitude control systems will have redundancy to guarantee reliability throughout its mission life. The satellites have been designed to be compatible with either the Ariane or NASA's Space Transportation System (STS) launch vehicles.

5. The system's ground segment will consist of two U.S. receive and transmit earth stations located in Miami and New York City for distributing programming on the video service channels. Other such earth stations will be constructed and operated by the PanAmSat users throughout Latin America. PanAmSat's tracking, telemetry and control (TT&C) facility will be located on Long Island in New York State and the TT&C service will be provided by Hughes Communications.

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[1] PanAmSat modification and amendment in File No. CSS-84-004-P (LA) (filed January 11, 1985). We will hereinafter consider PanAmSat's proposal to incorporate the technical and design specifications contained in its modification and amendment.

[2] These beams' coverage pattern will include (1) the Caribbean and parts of Central America; (2) the Northwest/Andean region of South America (west beam); (3) Argentina/Chile (south beam); and (4) the South American continent. As occasional needs of its customers and OTI demand, it will be possible to provide video and audio feeds through the west beam to the Iberian Peninsula (Spain and Portugal).

6. PanAmSat estimates the total capital cost of its proposed system to be $210 million. These costs are divided among the primary satellite and in-orbit spare, and design changes in the spare second satellite, at approximately $105 million and $5 million, respectively; two launches and launch insurance at approximately $60 million and $26 million, respectively; and two U.S. transmit and receive earth stations at approximately $1.5 million. PanAmSat states that it expects to obtain the necessary funds for initial preoperating expenses and some long-term financing from bank financing, the issuance of limited partnership interests, transponder sales or a combination thereof. PanAmSat adds that its projected revenue from transponder sales, leases and annual TT&C service charges for its satellite at 57 degrees West Longitude will be over $278 million, and for its satellite at 45 degrees West Longitude, will be $239 million approximately and will provide PanAmSat with much of its long-term financing.

7. PanAmSat states that its proposal serves the public interest through both its development of new markets for American products and services and its generation of new United States international investment opportunities in Latin America by improving communication capabilities. By promoting the dissemination of English and Spanish-speaking programming and enabling increased trade between regions, PanAmSat expects to strengthen existing cultural, economic and political bonds between the United States and Latin America as well as further the objectives of United States foreign policy. PanAmSat states that its proposed services are a natural and logical extension of the policies and economic rationales underlying the Commission's *Transborder* decision.[3] Further, it believes that authorization of PanAmSat's proposal would ensure continued United States leadership in satellite development and would facilitate efficient utilization of scarce orbital resources.

8. PanAmSat contends that authorization of its proposed system is fully consistent with the Communications Satellite Act of 1962, as amended, 47 U.S.C. Sections 701-744 (1984), and that the statute contemplates the creation of an additional satellite system. Section 102(d) of the Act provides that it is not the intent of the statute to preclude the establishment of an additional communications satellite system when one is required by the national interest. Further, Section 201(a)(6) of the Act provides that the President shall allow the use of a separate satellite system when required by the national interest. Moreover, PanAmSat states that the Commission found in its *Transborder* decision that the Satellite Act and its legislative history establish that non-INTELSAT international satellite services can be authorized between the United States and other countries. PanAmSat notes that INTELSAT has neither

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[3] Transborder Satellite Video Services, 88 FCC 2d 258 (1981) (hereinafter referred to as "*Transborder*").

the flexibility nor capacity to meet the demands of subregional video and audio distribution for realistically fostering the mutual exchange of programming. In many cases, argues PanAmSat, capacity must be reserved far in advance of transmission and there is a worsening congestion of INTELSAT facilities due to the fact that traffic is routed over the same satellite serving North America, Europe and Latin America. INTELSAT's services are therefore impractical for PanAmSat's prospective customers. Finally, PanAmSat avers that INTELSAT's price structure for video service also makes its services uneconomical for subregional video distribution and that the additional charge imposed by INTELSAT for every additional receive earth station discourages large-scale efficient networks.

9. PanAmSat states that its proposal is fully consistent with the INTELSAT Agreement in that the Agreement expressly provides for the establishment of non-INTELSAT facilities and the coordination of those facilities with INTELSAT under Article XIV(c) of the Agreement. Countries procuring the proposed service for their domestic telecommunications requirements will be required to coordinate for technical compatibility with INTELSAT under Article XIV(c); because this service will not be offered in the United States, PanAmSat is under no obligation to coordinate under Article XIV(c). With regard to PanAmSat's proposed subregional video distribution, PanAmSat projects that it would divert only approximately $330,000 (less than one percent) of INTELSAT's $391 million in revenue and, thus, cannot be expected to cause significant economic harm to INTELSAT. PanAmSat argues that in light of overall expected growth in the international telecommunications market, INTELSAT's reported fifty percent rise in demand for international video service between 1982 and 1983 and PanAmSat's development of new markets in Latin America that would not otherwise be available will not result in any economic harm to INTELSAT.

II. The Pleadings

10. Comsat, in its petition to deny, argues that grant of PanAmSat's application would be inconsistent with the United States' commitment to the INTELSAT system as embodied in the Communications Satellite Act of 1962 and reaffirmed in the Commission's *Transborder* order. Comsat first avers that the application does not meet the standard set forth in Section 102 of the Act, which requires that the proposed additional system "meet unique governmental needs" or be "required in the national interest." 47 U.S.C. 701(d). This statutory language, argues Comsat, clearly calls for more rigorous showing of need than that called for by the ordinary public interest standard, which PanAmSat has not met in any case. Comsat states that the narrowly drawn standard enunciated in the

Buckley letter[4] and embraced in the *Transborder* decision, that use of non-INTELSAT space segment facilities for the provision of international services would be allowed in "certain exceptional circumstances," precludes PanAmSat's use of such facilities.

11. Comsat states that while the Atlantic Ocean Region (AOR) Primary satellite may suffer from some congestion, there is ample television capacity available on the other six AOR satellites at all times of the day to meet Latin America's requirements for occasional use and full-time television service. With regard to the issue of economic harm, Comsat claims that Latin America occasional use television traffic has historically amounted to about thirty-three percent, not five-percent as alleged by PanAmSat, of INTELSAT's total occasional use television traffic. Comsat argues that PanAmSat would be expected to divert more than $33 million per year, not PanAmSat's projected $330,000 per year, from INTELSAT. Most importantly, adds Comsat, PanAmSat will have sufficient capacity to divert *all* of INTELSAT's Latin American occasional use and full-time television traffic, even assuming that only 12 transponders are used for this purpose. Comsat states that whatever benefits might accrue from PanAmSat's proposed domestic service as well as PanAmSat's ability to avoid the application of Section 102(d) and Article XIV(d), they cannot be used to justify proposal that is otherwise contrary to the Satellite Act and the INTELSAT Agreement. Finally, Comsat contends that granting PanAmSat authority to launch its own satellite for the purpose of providing international telecommunications services would be perceived as promoting inefficient use of orbital slots and as repudiating prior United States efforts to promote conservation of these resources internationally as well as compromise United States efforts to discourage adoption of planned assignments of orbital slots and frequency spectrum at the 1985 and 1988 Space WARCs.

12. AT&T urges that the extent of the economic impact on INTELSAT be carefully considered, particularly in view of the expressed concern of a number of Latin American countries on the impact which alternate satellite systems will have on the INTELSAT system. AT&T requests that should PanAmSat's proposed system be authorized, the Commission clearly state that neither AT&T nor any other carrier will be required to route traffic by PanAmSat's system if its venture proves to be less

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[4] In a letter from Under Secretary of State James Buckley to the Chairman of the Commission, the Department of State announced the Executive branch's position of recognizing U.S. reliance on domestic satellites for public international telecommunications with nearby countries in "certain exceptional circumstances" such as "where the global system could not provide the service required" or "where the service planned would be clearly uneconomical or impractical using the INTELSAT system." *See* letter from the Under Secretary of State for Security Assistance, Science and Technology to Chairman Fowler, dated July 23, 1981.

successful than anticipated. By the same token, adds AT&T, all carriers should be treated equally with respect to their ability to use the PanAmSat system should it be authorized and offered to common carriers.

13. Digisat states that it filed an application with the Commission on November 7, 1983, for authority to launch and operate a domestic telecommunications satellite at the orbital slot at 57 degrees West Longitude. Digisat claims that the system proposed by PanAmSat creates a possibility of interference from the Standard C-band transmission and downlinks with Digisat's proposed system. Digisat states that its service would be better protected if that Commission were to grant the PanAmSat application at 59 degrees or further West, rather than at 57 degrees, previously specified by Digisat, as such relocation would be consistent with the elevation angle sought by PanAmSat and would eliminate any potential interference with the Digisat satellite.[5]

14. In addition to these pleadings, the Commission has received many letters from signatories to INTELSAT expressing concern that possible changes in United States policy regarding competing international satellite systems would not be consistent with the United States' legal commitments to INTELSAT. Generally, these letters claim that the competing systems propose to concentrate their services in the high traffic routes in the North Atlantic Basin and, in effect, receive high earnings while meeting the requirements of a small number of large users. For INTELSAT, it is argued, this would result in the loss of large traffic trunks and would significantly reduce the revenues available to meet its capital investment requirements and hold down rates throughout the world. Such a change in U.S. policy would negatively impact all users of INTELSAT, in particular, the people in small and developing countries. Also expressed is the concern that the United States' approval of any of the pending applications would lead to a proliferation of other United States satellite systems intending to carry public international telecommunications traffic in direct competition with INTELSAT which, in turn, would encourage other INTELSAT members to make similar authorizations for separate systems.

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[5] ISI and Orion move to strike the comments of both Philip Trezise and the firm Wiley & Rein as they fail to comply with the procedural requirements of Section 309(d)(1) of the Communications Act of 1934 regarding the submission of documents to the Commission by parties in interest. ISI and Orion state that both sets of comments were at least indirectly funded by INTELSAT, whose members, including Comsat, have expressed opposition to the pending applications for private satellite systems. ISI and Orion also state that such submissions were made without disclosing the work had been subsidized by an interested party. ISI and Orion further argue that both filings must be rejected as informal objections as they fail to meet the minimal requirements of setting forth specific factual allegations with respect to any of the proposals for private satellite systems.

15. PanAmSat, in its opposition to Comsat's petition to deny, states that even though its proposed domestic service will use at least two-thirds of its capacity, Comsat fails to acknowledge the obvious differences between PanAmSat and the other applicants. PanAmSat notes, however, that these objections are directed only to its proposed regional television transmission. PanAmSat maintains that its proposed system will serve the national and foreign policy interests of the United States as well as those of Latin American nations. In its motion to strike filed simultaneously with its opposition to Comsat's petition to deny, PanAmSat moves to strike those portions of Comsat's petition that deal with Comsat's allegations of economic harm to INTELSAT. First, PanAmSat argues that a "recommendation" concerning economic harm is under the jurisdiction of the INTELSAT Assembly of Parties, not the Commission. Further, such recommendation should be considered by the Assembly subsequent to PanAmSat's authorization. In addition, PanAmSat claims that the Commission, in its *Transborder* order, determined that applicants could rely on the agreement of the receiving and transmitting nations in lieu of a recommendation by the Assembly of Parties. Second, PanAmSat claims that comsat has failed to meet its burden of demonstrating economic harm. PanAmSat states that while Comsat challenges its estimates of traffic diversion from the INTELSAT system, it refuses to provide PanAmSat with the backup data to evaluate its challenge as required under Section 7(a) of the Communications Act, 47 U.S.C. 157(a), which establishes a presumption that new technologies and services are in the public interest. On August 3, 1984, PanAmSat filed a request for inspection of records pursuant to the Freedom of Information Act, 5 U.S.C. Section 552, and the Commission's implementing regulations, 47 C.F.R. Section 0.461, *et. seq.*, to make available INTELSAT Board of Governors document, "Summary of Certain Legal Inhibitions of INTELSAT," BG-59-29, Addendum No. 1 (June 14, 1984). PanAmSat also filed with the Commission a copy of a letter from Norman Leventhal, counsel for PanAmSat, to Lawrence Devore, Vice President, Law and Administration, World Systems Division of Comsat (August 1, 1984), requesting that Comsat make available to both the Commission and the public specific information regarding INTELSAT services to and satellite coverage of Latin America, satellite capacity, traffic, revenues and projections of each.

16. With regard to AT&T's request that the Commission state that neither AT&T nor any other common carrier will be required to use PanAmSat's system, PanAmSat does not find such a statement warranted. PanAmSat avers that it does not intend to provide international public switched service and that United States-Latin American interconnection is a minor part of the PanAmSat proposal and will be limited to

audio and video transmissions. PanAmSat opposes Digisat's suggestion that PanAmSat move to 59 degrees West Longitude. PanAmSat contends that it is inappropriate for PanAmSat's orbital request to be affected since: (1) Digisat may receive no orbital location, (2) Digisat may receive an orbital location anywhere within the North American geostationary arc, and (3) any orbital location Digisat does receive may be changed on thirty days notice. Finally, even should Digisat receive an orbital assignment at 57 degrees West Longitude, interference avoidance burdens should fall primarily on redundant domestic systems, such as Digisat, not a first-of-a-kind satellite system such as PanAmSat.

17. In reply to PanAmSat's opposition, Comsat maintains that PanAmSat has not satisfied the *Transborder* test, but merely asserts that "the ongoing Executive Branch study of additional international satellite systems . . . may suggest that the FCC eliminate or modify the (*Transborder*) criteria." With regard to the Article XIV(d) requirements, Comsat contends that PanAmSat merely moves to strike all portions of Comsat's petition to deny relating to economic harm to INTELSAT rather than address the merits of the petition. Comsat claims that Section 7 of the Communications Act applies only to proposals for "*new* technologies and services," not to the provision of existing technologies and services by new service providers (emphasis in original), that there is no indication in the legislative history that Section 7 was intended to apply to international services, and that Section 7 does not override Section 102(d) of the Satellite Act, 147 U.S.C. 701(d), which requires that applicants show that their proposed system is required in the national interest. Comsat states with regard to the assessment of potential economic harm to INTELSAT that the Commission may properly consider the impact of proposed services upon INTELSAT. The Commission in its *Transborder* order made it clear that it would not authorize international communications satellite services without a prior finding that such services would be consistent with United States obligations under the INTELSAT Agreement, regardless of the fact that the Assembly of Parties would subsequently address this issue. Comsat reiterates its argument in its petition to deny that regardless of how much traffic PanAmSat's proposed system would divert in PanAmSat's estimation, the proposed system would have sufficient capacity to divert all of INTELSAT's Latin American occasional use and fulltime television traffic and would be capable of diverting substantial transatlantic traffic. Finally, Comsat avers that the letters PanAmSat relies upon for an indication of need for its proposed services suggest that PanAmSat may be seeking to market a much broader array of services than those discussed in its application and that PanAmSat may be actively seeking European customers for transatlantic services, contrary to the impression PanAmSat conveyed in its

application.[6]

III. Discussion

18. PanAmSat's application is one of six applications that have been filed to construct and operate international satellite systems separate from INTELSAT. At the request of the Departments of State and Commerce, the Commission has refrained from taking final action on any of the applications until such time as the Executive branch could analyze the impact of the proposals on the national interest and foreign policy of the United States.[7]

19. In November 28, 1984, President Reagan signed a Presidential determination that alternative satellite systems are "required in the national interest" within the meaning of Sections 102(d) and 201(a) of the Communications Satellite Act of 1962, subject to certain limitations.[8] The Departments of State and Commerce concurrently, at the direction of the President, jointly informed the Commission by letter of the Presidential determination and the criteria necessary to ensure that the United States meets its international obligations.[9] The limitations set forth by the Executive branch require, first, that each system be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public switched message networks (except for emergency restoration services), and second, that one or more foreign authorities authorize the use of the proposed system and enter into consultation procedures with the United States under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm.

20. The Presidential determination satisfies the requirement for a threshold finding under the Communications Satellite Act that the proposed separate systems are "required in the national interest." The Presidential determination, however, is a general policy decision and is not intended to decide which, if any, applications now before the Commission should be granted. It has been the Commission's task to establish a policy for regulatory consideration of the applications and to determine whether any of the proposed systems should be licensed under the public interest

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[6] PanAmSat filed a reply to Comsat's opposition on September 24, 1984, reiterating the arguments it made earlier in its motion to strike.

[7] Letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, and Diana Lady Dougan, Coordinator, International Communications and Information Policy, to Chairman Fowler, in FCC File No. CSS-83-002-P, dated April 6, 1983; Letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, to Chairman Fowler, in FCC File No. CSS-83-004-P (LA) (August 26, 1983).

[8] Presidential Determination 85-2 (November 28, 1984).

[9] Letter from George P. Schultz, Secretary of State, and Malcolm Baldridge, Secretary of Commerce, to Chairman Fowler, in CC Docket No. 84-1299 (November 28, 1984).

standard of the Communications Act of 1934 consistent with the Presidential determination.

21. We initiated an inquiry and rulemaking in CC Docket No. 84-1299 to solicit data and analyses regarding issues that have arisen in connection with the applications.[10] In that proceeding, we considered the potential public benefits of authorizing the proposed systems, the economic impact of the systems on INTELSAT, and their effect on consumer service providers and equipment manufacturers. In addition, we considered legal, technical and other policy issues that must be taken into account in considering the applications. Further, from a regulatory perspective, we considered unresolved questions concerning the scope and applicability of the Executive branch's service limitations.

22. In our *Separate Systems* decision in CC Docket No. 84-1299, we have today concluded that the establishment of separate satellite systems will result in substantial benefits to users of international satellite communications services.[11] Separate Systems will provide currently unavailable service enhancements to users with special communications needs, stimulate technological innovation and new services, improve network efficiencies and reduce user costs, and contribute to the creation of new business and trade opportunities. We have further concluded that authorization of separate satellites subject to the Executive branch limitations provides reasonable assurance that INTELSAT will avoid significant economic harm from the entry of new suppliers. In reaching these conclusions, we have addressed and resolved issues which were raised in response to PanAmSat's and the other applications. We thus find it unnecessary to address these issues in this order. Here, we will determine whether PanAmSat's application is consistent with the Executive branch limitations, whether PanAmSat has the requisite legal, financial and technical qualifications under Title III of the Communications Act, and whether grant of the application otherwise satisfies the public interest standard of the Communications Act, and we will address any outstanding issues particular to this application. We believe our decision here, along with our decision in CC Docket No. 84-1299, adopted today, is fully dispositive of all issues and arguments raised with respect to PanAmSat's application.

Consistency With Executive Branch Service Restrictions

23. As we have discussed in our *Separate Systems* decision, the purpose of the Executive branch restrictions is to avoid significant

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[10] Establishment of Satellite Systems Providing International Communications, Notice of Inquiry and Proposed Rulemaking, 50 Fed. Reg. 1570 (released January 4, 1985) (hereinafter referred to as the "*Separate Systems*" Notice).

[11] Separate Satellite Systems, Report and Order, FCC 85-399 (released 9-3-85).

economic harm to INTELSAT. Through these service limitations, INTELSAT's "core" revenues obtained from supplying space segment capacity for international switched message services would be protected from diversion by new suppliers. According to the Executive branch restrictions, separate systems are to be ". . . restricted to providing services through the sale or long-term lease of transponder or space segment capacity for communications not interconnected with the public switched message networks." However, we found it necessary in our *Separate Systems* decision to clarify and further develop the restrictions to assure that they are understood by all parties and can be implemented from a regulatory standpoint.

24. We have determined that no communications provided over separate satellite system space segment capacity may interconnect with the public switched facilities of common carriers to provide switched-message services such as MTS, telex, TWX, telegraph, teletext facsimile and high speed switched data services. In addition, we decided to apply the "no interconnection" and "sale and long-term lease" restrictions not only to separate system operators, but also to all levels of users of the facilities. And, in view of the "sale and long-term lease" requirement, separate system licensees may not operate as common carriers. Finally, we have determined the following: (1) there is no need to establish a minimum unit of space segment capacity which a separate systems must provide; (2) the minimum lease period for the "long-term lease" of capacity is to be one year; (3) space segment capacity may be obtained and resold by common carriers and enhanced service providers to provide communications services not interconnected with any public switched message network; and (4) there is no basis to establish a "sunset" date for the Executive branch service restrictions absent a finding from the Executive branch that they are no longer necessary to fulfill U.S. international obligations.

25. PanAmSat's application is consistent with the Executive branch restrictions.[12] PanAmSat proposes to offer its subregional satellite capacity on a selective non-common carrier basis through either sale or lease of its transponder capacity. PanAmSat does not propose to permit interconnection of its facilities with public switched facilities. Common carriers and enhanced service providers may obtain PanAmSat's space segment capacity to provide services not interconnected with public

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[12] PanAmSat proposes to serve the Latin American domestic market in addition to the subregional, or international, video and audio market. Because Article XIV(d) of the INTELSAT Agreement is only concerned with international satellite service, we need not address PanAmSat's proposed Latin American domestic service for the purpose of analyzing significant economic harm to INTELSAT. *See* n. 19 at 18. *See also* our discussion of significant economic harm in the *Separate Systems* decision in Section VI. B.3(e).

switched networks. All the restrictions concerning interconnection and "sale and long-term lease" practices apply not only to PanAmSat but to all levels of users of its facilities.

Legal Qualifications

26. PanAmSat has submitted the Common Carrier and Satellite Radio Licensee Qualification Report (FCC Form 430) and on amendment to this Report. The PanAmSat system will be owned by the PanAmSat Limited Partnership, which, in turn, will be owned by the PanAmSat Corporation (20 percent), the general partner, and by limited partners (80 percent). The limited partners will include users and/or outside investors. The PanAmSat Corporation was incorporated in Delaware in April 1984. The common stock of the PanAmSat Corporation is owned by RFW Satellite Services (RFW) (80 percent), a partnership, and Mr. Emilio Azcarraga Milmo (20 percent). RFW provides earth station and communications satellite transmissions services and is owned by Reynold Anselmo (55 percent), President of Spanish International Network, Inc. (SIN); William Stiles (20 percent), Executive Vice President of SIN; Frederick Landman (20 percent), and John Pero (5 percent), Vice Presidents of SIN. Mr. Azcarraga is President of Television, S.A., a Mexican commercial television network, and is Chairman of the Board of SIN. Mr. Anselmo is Chairman of the Board of Directors of the PanAmSat Corporation.

27. Aside from the immediate application, the PanAmSat Corporation does not currently have any applications pending before the Commission. However, Mr. Anselmo and Mr. Stiles, who together own 60 percent of the Corporation, have ownership and other interests in three corporations that have submitted renewal applications for television broadcast station licenses.[13] These applications are currently in hearing before the Commission in MM Docket No. 83-540, et al.[14] for alleged violations of Section 310(b) of the Communications Act, 47 U.S.C. Section 310(b) (1985). Section 310(b) expressly refers only to broadcast, common carrier or aeronautical systems, not to the private satellite system proposed by PanAmSat, and, thus, does not restrict the amount of foreign control of PanAmSat's system. However, should the proceeding in MM Docket No. 83-540 result in a finding that PanAmSat has violated the Act or our rules, such a finding could reflect adversely on PanAmSat's qualifications to hold a satellite radio license. We reserve the right to revisit our findings here following a final decision in that proceeding. On the basis of FCC Form 430 and attendant documents submitted to the Commission by PanAmSat,

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[13] The Corporations to which we refer are Spanish International Communications Corporation, Bahia de San Francisco Television Company and the Seven Hills Television Company.

[14] Hearing Designation Order, 48 Fed. Reg. 28549 (June 22, 1983).

we find that PanAmSat possesses the requests legal qualifications to own and operate an international satellite system. Should PanAmSat, in the future, intend to utilize its capacity to provide broadcast services to the public, it would need to comply with Section 310(b). Under these circumstances, PanAmSat would be required to submit to the Commission a modification of its license, containing any data that may be relevant to the Commission in reaching a determination of whether the PanAmSat system possesses excessive foreign ownership according to the criteria specified in Section 310(b) of the Communications Act.

Financial Qualifications

28. In assessing an applicant's ability to construct, launch and operate an international satellite system, we must consider the applicant's financial competence or qualifications. We determined in our *Separate Systems* order that an applicant must demonstrate its financial preparedness to assume the costs and liabilities involved in constructing, launching and operating the system for one year. The applicant must show its current financial ability to meet the costs and expenses of planning, constructing, launching and operating its proposed system.[15] However, in view of the fact that an applicant must undergo the INTELSAT consultation process, and due to the resulting uncertain status of the application pending this process, the applicant is unlikely to receive firm financial commitments. Therefore, we decided in our *Separate Systems* decision to consider the financial qualifications of applicants in two stages.

29. In the first stage, the applicant must demonstrate: (1) the estimated costs of proposed construction and launch, and any other initial expenses for the proposed space station(s); (2) the estimated operating expenses for one year after launch of the proposed space station(s); and (3) the source(s) or potential source(s) of funding of the proposed system for one year, which would include the identity of financiers and their letters of financial interest. For the applicants which meet these minimal criteria, we will issue a construction permit setting forth the approved technical parameters of the proposed system for purposes of INTELSAT technical coordination under Article XIV(d). The applicant must additionally meet the following second state criterion to be given permission to begin construction: the applicant's current financial ability to meet the costs of construction and launch, and operating expenses for one year

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[15] The financial qualifications required for obtaining a license are in addition to the various requisites of the application process, specifically the limitations prescribed by the Presidential determination, the INTELSAT Article XIV(d) consultation process, and a finding by the Department of State that the United States has fulfilled its obligations and has satisfied the Title III public interest requirements pursuant to the Communications Act of 1934.

after launch.[16]

30. PanAmSat adequately demonstrates that it possesses the requisite minimal financial qualifications. First, PanAmSat estimates that the total capital cost of its system is approximately $197.5 million, broken down as follows: primary satellite and in-orbit spare at $105 million; design changes in spare/second satellite at $5 million; two launches at $60 million; launch insurance at $26 million; and two U.S. transmit and receive earth stations at $1.5 million.[17] Second, PanAmSat indicates that the required capital for its system will be acquired from a combination of bank financing, issuance of limited partnership interests and transponder sales. Revenues from transponder sales, leases and annual TT&C service charges are projected to exceed $239 and are expected to provide PanAmSat with a considerable amount of its long term financing. Preoperating expenses are expected to be met by PanAmSat's existing stockholders as well as by the sale of limited partnership interests or banks financing.

31. In view of this showing, we are issuing PanAmSat a construction permit conditioned on its subsequent timely submission of the requisite second stage financial information. PanAmSat will be permitted to commence construction only should it timely satisfy the second stage financial requirement. As provided by the procedures established in our *Separate System* decision, PanAmSat must meet this requirement no later than 60 days following the receipt by the Commission of the State Department's letter stating that the United States has fulfilled its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system. At that time, we will issue an order permitting PanAmSat to begin construction. However, PanAmSat may begin construction prior to receipt of the State Department's letter if it can satisfy the second stage requirement prior to that time. Should the

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[16] A demonstration of current financial ability to meet such costs and expenses would include the submission of a balance sheet, verified by affidavit, current for the latest fiscal year and documentation of any financial commitments reflected in the balance sheet together with an exhibit demonstrating that the applicant has current assets and operating income sufficient to meet its estimated construction, launch and operation costs and expenses. For newly established entities unable to submit a current balance sheet, these applicants shall submit an exhibit indicating the estimated income or revenues anticipated from the proposed operation of the satellite system necessary to meet the estimated costs of construction, launch and operation along with any additional information requested by the Commission. Such additional information could include scheduled debt financing or stock issues, established lines of credit or other forms of internal financing. If the applicant is owned by more than one corporate parent, it must submit evidence of a commitment to the proposed satellite program by management of the corporate parent upon whom it is relying for financial resources.

[17] Modification and Amendment to Application, File No. CSS-83-004-P(LA) (received January 11, 1985).

condition of the second stage not be timely satisfied, or untimely satisfied without good cause shown, the conditional construction permit will become null and void and the orbital locations tentatively assigned to PanAmSat will become available for reassignment. Once either the conditional construction permit or Commission order permitting construction by the applicant is issued, PanAmSat bears all risks and liabilities in commencing construction of its satellite system pending final Commission issuance of launch authority and a license to begin operation.

Technical Qualifications

32. We have evaluated the space station facilities proposed by PanAmSat with respect to the standards and policies we have adopted in our *Separate Systems* order. The proposed facilities meet our standards for full frequency reuse, and it appears that they can be operated in a manner consistent with Commission rules and the International Radio Regulations once placed in orbit. PanAmSat has predicated its interference budget on its facilities being compatible with the Commission's 2 degree-spacing policies, and we expect that there should be no significant problems as we implement those policies for the proposed satellites and other U.S. satellites which may be adjacent to them. Therefore, we find that the proposed facilities meet our technical requirements.

Other Issues

33. With regard to AT&T's request that the Commission clearly state that it shall disregard any requests of PanAmSat to compel common carriers to use spare capacity in its system should its application be granted, we find such a request unwarranted by the present circumstances. We agree that PanAmSat should not be guaranteed any market share or services. We conditionally authorize qualified applicants without any guarantee of traffic from U.S. international common carriers or other sources. It shall be this Commission's policy that any such private systems succeed or fail on their own merits and not through Commission action that would guarantee common carrier use of the systems.[18] At the same time, we determined in our *Separate Systems* decision not to prohibit common carrier use of the system and will consider any proposed common carrier purchase of capacity in the context of our normal facility planning and authorization procedures. We took this approach in authorizing private international submarine cable systems.[19]

34. With regard to Digisat's claim that PanAmSat's proposed system creates potential interference with the proposed Digisat satellite, we find that Digisat's withdrawal of its domestic satellite application renders this

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[18] *See* Tel-Optik Limited, *et al.*, FCC 85-99 (released April 5, 1985).

[19] *Ibid.*

issue moot.[20]

35. With regard to Orion's and ISI's motions to strike comments filed by Philip Trezise and the firm Wiley & Rein, we find that such remarks cannot be barred based on a mere suspicion that entities other than those submitting the remarks were or are undisclosed parties in interest under Section 309(d)(1) of the Communications Act. While ISI and Orion have raised concern as to the nature and extent of INTELSAT's relationship with Trezise and Wiley & Rein, we are hesitant to rely upon the newspaper articles cited by ISI as sufficient demonstration of INTELSAT's undisclosed interest in this proceeding. As to Orion's and ISI's requests that the Commission reject these same comments as informal objections, we find that while the comments at issue do not set forth specific allegations regarding any of the pending separate satellite applications, they do generally address matters raised by these applications. We conclude, therefore, that the Commission's desire to compile a complete and comprehensive record regarding issues as novel as those presented here will best be served by accepting for filing the remarks of Trezise and Wiley & Rein. We do not believe either ISI or Orion or any other separate satellite systems applicant will be prejudiced by our decision.

36. With regard to PanAmSat's motion to strike those portions of Comsat's petition to deny dealing with Comsat's allegations of economic harm to INTELSAT, we find this motion, too, unwarranted. Comsat's petition to deny in its entirety raises issues of genuine concern before the Commission.

Public Benefits

37. On the basis of our analyses in our *Separate Systems* decision, we find that, with respect to the type of information transmitted, the services now offered or planned by INTELSAT are generally comparable to those proposed by PanAmSat, such as video, audio and data transmission services. We also find several crucial differences between PanAmSat's proposed services and the services offered or planned by INTELSAT. First, with regard to satellite downlink power, we find that INTELSAT, as a general matter, cannot equal PanAmSat in achieving combinations of earth station size, transmission rates, connectivity user control, security and costs that may be described by a user with special needs. Second, with regard to coverage and connectivity of satellites providing customer-premises services, we find that PanAmSat's proposed network far exceeds that of INTELSAT. Third, PanAmSat proposes to both sell and lease its space segment capacity whereas INTELSAT, which is permitted

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[20] *See* letter to the Commission from counsel for Digisat, dated July 10, 1985, withdrawing its applications 939, 940, 941 DSS-P/LA-84, in FCC 85-404-424.

to sell its transponder capacity, only leases it. PanAmSat's proposal to sell or lease space segment capacity on a non-tariffed basis will provide international users with the same benefits that domestic users have enjoyed as a result of the Commission's *Domestic Transponder Sales* decision.[21] Private sale of space segment capacity will: (1) permit the providers of capacity to make tailored and flexible arrangements with customers that are not possible under the regimen of a tariffed service offering; (2) enable customers to make long-term plans for the use of facilities with assurance as to facility availability and price; (3) permit systems to be specifically designed to customer needs, and (4) result in positive market development for new and innovative service offerings. We found in our *Separate Systems* decision as we did in authorizing private submarine cable facilities that users with bulk capacity needs for special service requirements for international services should enjoy the same benefits.[22]

38. Authorization of PanAmSat's proposed separate system would provide substantial benefits to users of international satellite communications services. PanAmSat, as well as other authorized international separate systems applicants, would provide currently unavailable service enhancements to users with special communications needs, stimulate technology and service development and reduce rates. In addition, PanAmSat's proposed system would offer to customers with alternative suppliers to fulfill their special needs. We further find that application of competitive pressure to INTELSAT within the limited service area outlined above would result in the further development of this market and encourage service innovation. Based on the fact that PanAmSat's services will be offered within the confines of the Executive branch restrictions, and in view of our findings in our *Separate Systems* decision, we find here that PanAmSat's proposed system, as modified, will not cause significant economic harm to INTELSAT.

39. Finally, with regard to Comsat's petition to deny PanAmSat's application, we find, on the basis of the records compiled both in this proceeding and in the *Separate Systems* docket, that Comsat presents no substantial and material questions of fact, and that a grant of Title III authority to PanAmSat will serve the public interest, convenience and necessity under Section 309(a) of the Communications Act of 1934.[23]

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[21] Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1251 (1982), *aff'd sub nom* Wold Communications, Inc. v. FCC, 735 F. 2d 1465 (D.C. Cir. 1964).

[22] Tel-Optik Limited, *et al.*, FCC 85-99 (released April 5, 1985).

[23] We need not consider PanAmSat's proposed Latin American domestic satellite service since Article XIV(d) of the INTELSAT Agreement addresses only international satellite service for the purpose of determining significant economic harm to INTELSAT. As to PanAmSat's proposed subregional service, our analyses in our *Separate Systems* order accounts for this service. Specifically, in estimating the portion of INTELSAT's 1984

Therefore, pursuant to Section 309(d) of the Communications Act of 1934, we shall deny the petition to deny filed by Comsat.

40. Finally, with regard to Comsat's petition to deny PanAmSat's application, we find, on the basis of the records compiled both in this proceeding and in the *Separate Systems* docket, that Comsat presents no substantial and material questions of fact, and that a grant of Title III authority to PanAmSat will serve the public interest, convenience and necessity under Section 309(a) of the Communications Act of 1934.[24] Therefore, pursuant to Section 309(d) of the Communications Act of 1934, we shall deny the petition to deny filed by Comsat.

41. Accordingly, IT IS ORDERED pursuant to Sections 4(i) and (j), 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 303-319 (1976), that application File No. CSS-84-004-P (LA), as amended and modified, IS GRANTED and Pan American Satellite Corporation IS CONDITIONALLY AUTHORIZED to construct two in-orbit satellites in accordance with the terms, conditions, and technical specifications set forth in its amended and modified application and the formal instruments of authorization to be issued at a later date.

42. IT IS FURTHER ORDERED that final authorization for both launch and operation of these satellites shall not be issued unless and until: (1) one or more foreign authorities authorize use of each system and enter into consultation procedures with the United States Party under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm; and (2) the Department of State informs the Commission that the United States has completed its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system.

43. IT IS FURTHER ORDERED that as a condition of this order, PanAmSat must file with the Commission copies of any operating agreements entered into by PanAmSat within 30 days of execution.

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revenues that would have been accessible to separate satellite systems if they had been in operation in that year, we included the revenues INTELSAT earned from transponders leased to provide TV service in the entire Atlantic region. *See* our discussion of significant economic harm in the *Separate Systems* order in Section VI. B. 36.

[24] The Commission has received a letter from PanAmSat stating that it has signed a contract with Arianespace for launch services, and is negotiating with RCA Astro Electronics for the purchase of a satellite, in order for it to begin providing services similar to those proposed in its application by mid-1986 using an interim satellite spacecraft. Letter to Chairman Fowler, from Reynold V. Anselmo, Chairman, PanAmSat (July 3, 1985). PanAmSat does not indicate that it wishes to further modify its application and acknowledges that it is proceeding prior to receiving Commission authorization. Accordingly, this authorization is strictly limited to the facilities proposed in both PanAmSat's application and its January 11, 1985 amendment, and is without regard to PanAmSat's July 3, 1985 letter.

44. IT IS FURTHER ORDERED that the operation of PanAmSat's proposed system is to be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public-switched message networks (except for emergency restoration service).

45. IT IS FURTHER ORDERED that the Commission shall retain jurisdiction over the use of all space segment within the proposed system to insure compliance with the service restriction stated in paragraph 44 above.

46. IT IS FURTHER ORDERED that PanAmSat shall not begin construction of the satellites until it has provided the Commission with a demonstration of PanAmSat's current financial ability to meet the costs of construction and launch and operating expenses for one year following launch. PanAmSat shall file this information with the Commission no later than sixty days following receipt by the Commission of a letter from the Department of State informing the Commission that the United States has completed its Article XIV(d) obligations with respect to the proposed system and instructing the Commission that it may proceed with final authorization of the system. Should these conditions not be timely satisfied upon the expiration of the sixty-day period following receipt of the State Department's letter, unless extended by the Commission for good cause shown, this order permitting construction shall become null and void.

47. IT IS FURTHER ORDERED that PanAmSat is temporarily assigned the orbital locations at 45 degrees West Longitude and 57 degrees West Longitude for operation of its proposed two in-orbit satellites.

48. IT IS FURTHER ORDERED that the temporary assignment of any orbital locations to PanAmSat is subject to change by summary order of the Commission on 30 days notice and does not confer any permanent right of the use of the orbit or spectrum. Such a change may be ordered *inter alia*, in the event that the national security or the public interest so requires, or to implement any of the objectives or policies set forth in today's Report and Order, FCC 85-399 in CC Docket No. 84-1299. Neither this authorization nor any right granted by this authorization, shall be transferred, assigned or disposed of in any manner, voluntarily or involuntarily, or by transfer of control of any corporation holding this authorization, to any person except upon application to the Commission and upon a finding by the Commission that the public interest, convenience and necessity will be served thereby.

49. IT IS FURTHER ORDERED that PanAmSat shall comply with the Report and Order adopted today in CC Docket No. 84-1299.

50. IT IS FURTHER ORDERED that the petition to deny filed by Communications Satellite Corporation IS DENIED.

51. IT IS FURTHER ORDERED that the motion of PanAmSat to strike those portions of Comsat's petition to deny that deal with issues of economic harm to INTELSAT IS DENIED.

52. IT IS FURTHER ORDERED that the request of AT&T Communications, Inc. that the Commission clearly state herein that, should PanAmSat's application be granted, the Commission will not entertain any future request of PanAmSat to compel common carriers to use its spare space segment capacity IS DENIED.

53. Pan American Satellite Corporation is afforded 45 days from the date of release of this order to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

Appendix A

Submissions of Foreign Signatories

1. Department of Foreign Affairs, Director General, Republic of South Africa, December 10, 1984.
2. Ministry of Communications Post & Telecommunications Division, Bangladesh, December 17, 1984.
3. Pakistan Telegraph & Telephone, December 19, 1984.
4. State Minister of Transport and Communications - Democratic Republic of the Sudan, Hassan I. Bashir, January 3, 1985.
5. Office of Director - General; Brig. Masoor, Pakistan Telegraph & Telephone, January 7, 1985.
6. National Administrator of Telecommunications; Miguel C Guares, January 7, 1985.
7. CPRM Telecom International, Portugal, January 30, 1985.
8. Trinidad & Tobago Telecomm. Co. Ltd., West Indies, January 25, 1985.
9. Phillipine Communications Satellite Corp, Phillipines, January 23, 1985.
10. Dominican Republic CODETEL - Santo Domingo, January 28, 1985.
11. Telecommunications Authority Cyprus, January 28, 1985.
12. Ministere Des Postes & Telecommunications, Republique Du TCHAD, Chad, September 11, 1984.
13. Amman/Telecommunications Corporation, Jordan, September 13, 1984.
14. Gentel, Paris TLX, J. Grisier, France, October 22, 1984.
15. Hellenic Telecommunications Organization S.A., G. Douroudakis, Greece, October 30, 1984.
16. NICATELSAT, Nicaraqua, October 31, 1984.
17. Telespazio, Italy, November 13, 1984.
18. Nigerian External Telecommunications, Ltd., Nigeria, November 14, 1984.
19. Ministry of P&T, Beirut, Lebanon, Joseph Hachem, November 16, 1985.
20. Mohammad Shabid Ismail, Jordan, November 20, 1984.
21. Irish Telecommunications Board, T.J. Byrne's, CEO, Ireland, December 4, 1984.
22. Socialist Republic of Vietnam; Director General of Telecommunications Department, December 4, 1984.
23. Post & Telegraph Department, Director General, Bangkok Thailand, December 5, 1984.
24. Barbados Telecommunications Ltd., Barbados, April 20, 1984.
25. Hellenic Telecommunications Org. S.A. [OTE S.A.], April 20, 1984.
26. Ministerio de Communicaiones, Colombia, April 23, 1984.
27. Swedish Telecommunications Administration, Sweden, May 25, 1984.

28. General Directorale of Posts and Telegraphs, Denmark, May 25, 1984.
29. Netherlands Postal and Telecommunications Services, Netherlands, May 25, 1984.
30. Minister for Foreign Affairs and Trade, New Guinea, May 31, 1984.
31. Compantria Portuguesa Radio Marconi (CPRM), Portugal, May 31, 1984.
32. Hustituto Ecuatoriano de Telecommunicaciones, Ecuador, May 31, 1984.
33. Ministry of Posts and Telecommunications, W. Germany, June 18, 1984.
34. Departement des P.T.T., Zaire, June 26, 1984.
35. Trinidad & Tobago External Telecommunications Co., Ltd. [TEXTEL], June 27, 1984.
36. Telecommunications Internationales de la Cote D'Ivorie [Intelci].
37. Administration Marocaine des Postes el Telecommunications, Morocco, June 23, 1984.
38. Korea Telecommunications Agency re Resolution, S. Korea, August 6, 1984.
39. Ethiopian Telecommunications Authority, Ethiopia, August 28, 1984.
40. Telecommunications Inernationales Du Mali, Mali, September 4, 1984.
41. Compania Telefonica Nacional de Espana, Spain, March 6, 1984.
42. Ministry of Communications, United Arab Emirates, March 6, 1984.
43. Madagascar, March 6, 1984.
44. Regie des Telegraphes et des Telephones de Belgrique, Belgium, March 8, 1984.
45. Korea Telecommunication Authority, South Korea, March 12, 1984.
46. Telecommunications Department, Malaysia, March 12, 1984.
47. Philippine Communications Satellite Corporation, March 12, 1984.
48. Establishment General des Telecommunication, Syria, March 12, 1984.
49. Empresa Brasileira de Telecomunicacoes S.A. Brazil, March 12, 1984.
50. Norwegian Telecommunications Adriun, Norway, March 12, 1984.
51. International Telecommunications of Cameroon, Cameroon, March 14, 1984.
52. Entel (Empresa Nacional de Telecommunicaciones del Peru, March 14, 1984.
53. General Directorate of Swiss PTT, Switzerland, March 20, 1984.
54. Cypress Telecommunications Authority, Cyprus, March 20, 1984.
55. Empresa Nacional de Telecommunicaciones S.A., Chile, March 20, 1984.
56. Compania Domicana de Telefonos, Dominican Republic, March 20, 1984.
57. Telesengal, Senegal, March 20, 1984.
58. Ecuadorian Institute of Telecommunications, Ecuador, March 20, 1984.
59. Overseas Telecommunications Commission (OTC), Australia, March 21, 1984
60. Ministry of PTT, Conference & Int. Orgn. Dept., Saudi Arabia, March 28, 1984.
61. Telecommunications O'Haiti SAM, Haiti, April 9, 1984.

62. Secretariat of State, Vatican, April 9, 1984.
63. Postes et des Telegraphes, Austria, April 11, 1984.
64. Posts and Telecommunications Corp., Tanzania, April 11, 1984.
65. Overseas Telecommunication Service, Sri Lanka, April 11, 1984.
66. General Directorate of Posts and Telecommunications, Finland, April 11, 1984.
67. Kokusai Denshin Denwa Co., Ltd. [KDD], Japan, April 11, 1984.
68. General Directorate of Posts and Telecommunications, Iceland, April 17, 1985.
69. Ministry of Posts and Telecommunications, PRC, April 17, 1984.

Common Carrier
International Satellite Systems

Commission issued a *Report and Order* regarding the establishment of satellite systems which would provide international communications services and *Memoranda Opinions, Orders and Authorizations* of applications filed by International Satellite, Inc., Pan American Satellite Corporation, and RCA Communications, Inc. The Commission also issued *Memoranda Opinions and Orders* regarding applications filed by Orion Satellite Corporation and Cygnus Satellite Corporation.

—*RCA American Communications, Inc.*

FCC 85-401

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of the Application of RCA American Communications, Inc. for modification of authority to construct, launch and position a sixth in-orbit communications satellite to permit coverage of portions of Europe and Africa	File No. I-T-C-84-085

MEMORANDUM OPINION, ORDER AND AUTHORIZATION

Adopted: July 25, 1985; Released: September 3, 1985

BY THE COMMISSION:

1. The Commission has under consideration the captioned application, filed by RCA American Communications, Inc. (RCA Americom) on February 13, 1984, seeking authority pursuant to Sections 214, 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 214, 303, 308, 309, 319 (1976) to modify its sixth in-orbit domestic satellite to provide for antenna modification and the addition of switches to expand coverage on command of Europe and Africa.[1] RCA Americom

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[1] Authority to construct, launch and position Satcom VI was granted, RCA American Communications, Inc., 94 FCC 2d 441 (1983). *See* RCA Americom's application for

also addressed a letter to the Chairman of the Commission on February 15, 1984. RCA Americom also addressed a letter to the Chairman of the Commission on February 15, 1984.

2. The application was placed on public notice on March 2, 1984. Petitions to deny were filed by the Communications Satellite Corporation (Comsat), Western Union Telegraph Co. (Western Union), and International Satellite, Inc. (ISI). Comments were filed by AT&T Communications, Inc., (AT&T), Orion Satellite Corporation (Orion), and United States Satellite Corp., Inc. (USSC); RCA Americom filed a consolidated opposition and response. Other responsive pleadings were filed by CBS, Inc. and F. Latapie, the Director for External Relations for INTELSAT. Letters addressed to the Chairman of the Commission from various members of the United States Congress were also made part of the record as were letters from foreign signatories to INTELSAT.[2]

I. The Application

3. RCA Americom proposes to modify the antenna design on its previously authorized domestic satellite, Satcom VI, by adding transfer switches, a power divider network and two power combiner networks, and feedhorns to provide coverage of and service to and from Europe and Africa on command on six C-band transponders. The proposed switching components are essentially the same as those already used on other RCA Americom satellites, namely the Satcom V, Satcom IR and Satcom IIR. The transponders will be available for domestic and international service as needed. The potential uses of this capacity include video, teleconferencing and commercial communications, such as private leased channel and medium-speed data services, utilizing RCA Americom's own network of earth stations, as well as those owned by RCA Americom's customers. RCA Americom will also make available whole transponders to those commercial customers, such as other common carriers and international record carriers, which may require large capacity for their needs. Similarly, Satcom VI will provide domestic programming suppliers access to European cable systems. The C-band transponders will be used for the transmission of communications signals in the following traffic modes: FM-TV on either one or two channels per transponder; FDM-FM voice channels; TDM digital transmission; analog and digital SCPC; data channels operating at 56 KBps; wideband data transmissions at 1.544 MBps; High Speed Data at rates up to 50 MBps; and SSB-AM voice channels. The capacity of the system will be the transmission of as many

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construction authority, File No. 604-DSS-P/LA-82. Satcom VI was to operate in the 4/6 GHz bands and was to have 24 transponders of 36 MHz width.

[2] *See* Appendix A for a list of signatories who have submitted correspondence to the Commission.

as 2,892 one-way FDM-FM voice channels per transponder and 6,000 one-way SSB-AM voice channels per transponder.

4. The proposed service will be provided by Satcom VI from its orbital slot of 67 degrees West Longitude. The Satcom VI spacecraft would be modified to provide downlink service to Europe and Africa on six of the twelve odd-numbered (vertically polarized) transponders. A combined uplink service from the contiguous United States (CONUS) plus Europe plus Africa would be provided on all twelve odd-numbered (horizontally polarized) transponders. The above mentioned six transponders could be switched upon command from the ground from downlink coverage of CONUS to coverage of Europe and Africa. Similarly, the position of a switch on the spacecraft, also determined by command from the ground, would permit reception of uplink transmissions from either CONUS or CONUS plus Europe plus Africa.

5. RCA Americom estimates the total cost of modification, including switches, power networks and feedhorns to be approximately $700,000. The total investment cost for Satcom VI is approximately $80 million.[3]

6. RCA Americom states that its proposal serves the public interest by advancing the United States' procompetitive policy in the international satellite market. RCA Americom contends that such competition will foster the development of new services, increase the volume of existing services, create a market more responsive to the needs of customers, and stimulate the volume of traffic trough the increase in facilities, variety of service offerings and reductions in price. Furthermore, international service of the type proposed by RCA Americom will extend the usefulness of domestic satellites. RCA Americom notes that it already has an extensive network of earth stations working with its satellites and that the addition of antennas at these locations as needed will permit efficient communications with international points. The use of Satcom VI, avers RCA Americom, will provide an alternative, albeit a limited one, to INTELSAT. In this respect, adds RCA Americom, the relatively small quantity of transponders that will be used for international service will not pose the risk of irreparable economic harm to the INTELSAT system. RCA Americom states that even if there were some revenue effect on INTELSAT, there is no longer any reason to provide a totally protected status to it, especially in a market which accounts for such a small percentage of its revenues. RCA Americom also notes that it brings to the international satellite telecommunications area the unique experience of a domestic provider of satellite telecommunications to the public since 1975 as well as an innovator in satellite technology and service. Finally, RCA Americom argues that while it is aware that other applications pending before the Commission were filed approximately one year before RCA

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[3] *See* RCA American Communications, Inc., *supra,* n.1.

Americom's application, the Commission must extend similar treatment to all qualified applications and process RCA Americom's application with those of other applicants.

7. RCA Americom states that its proposal complies fully with the Communications Satellite Act of 1962, as amended, 47 U.S.C. §§ 701-744 (1984) and that the establishment of alternative international satellite systems was contemplated by the Act. Section 102(d) of the Act provides that it is not the intent of the statute to preclude the provision of international telecommunications services by any entity other than INTELSAT or Comsat when so required by the national interest. Moreover, RCA Americom states that the Commission found in its *Transborder Satellite Video Services* order that the Satellite Act does not preclude the use of non-INTELSAT facilities for international telecommunications service.[4] Finally, RCA Americom states that its proposal is fully consistent with the INTELSAT Agreement in that the Agreement contemplates the use of non-INTELSAT facilities and has procedures in Article XIV of the Agreement to coordinate these separate facilities with the INTELSAT system. RCA Americom argues that its proposal is consistent with Article XIV(d) of the Agreement in that the proposed system is technically compatible with that of INTELSAT in that its use of the proposed radio frequencies will not interfere with the INTELSAT system. RCA Americom adds that the proposed system will not cause INTELSAT significant economic harm. It argues that its use of a portion of one of its satellites, on an as needed basis, for service between the United States and parts of Europe and Africa would have far less impact than other uses already considered and approved by INTELSAT, such as the PALAPA-B system serving Indonesia, Malaysia, the Philippines, Signapore and Thailand; the European Communication System carrying intra-European traffic, ARABSAT providing service among Arab countries; and the Algerian use of the Intersputnik system for use among Algeria, several Eastern European countries, Russia and Cuba.

II. The Pleadings

8. Comsat, in its petition to deny, argues that grant of RCA Americom's application to modify would be inconsistent with the United States' commitment to the INTELSAT system as embodied in the Communications Satellite Act of 1962 and reaffirmed in the Commission's *Transborder* order *supra,* note 4 at 4. Comsat first avers that Section 102(d) of the Act clearly places the burden of establishing an overriding national interest requirement on the proponents of separate systems and contemplates a more stringent showing than the ordinary public interest

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[4] Transborder Satellite Video Services, 88 FCC 2d 258 (1981) (hereinafter referred to as "*Transborder*").

standard, which, Comsat adds, RCA Americom has failed to meet in any case. Comsat further states that the application does not meet the standard set forth in Section 102(d) of the Act, and made applicable to this case by the *Transborder* decision, which requires that the proposed additional system "meet unique governmental needs" or be "otherwise required in the national interest." 47 U.S.C. Section 701(d). In addition, Comsat contends that RCA Americom has failed to demonstrate that its proposed system would not impose significant economic harm on INTELSAT by putting forth the relative proportions of Satcom VI's capacity that would be used for domestic as compared to international service. Comsat states that RCA Americom is seeking authorization to use for transatlantic service six transponders, with a capacity exceeding the present level of active satellite service to Europe. As to the various systems previously accepted by INTELSAT, Comsat avers that all these systems, with the exception of Intersputnik, are purely regional systems that provide services that otherwise would have been provided, if at all, on existing or planned terrestrial networks, and not by INTELSAT; the Soviet Intersputnik system was made subject to numerous restrictions, including having usage limited to twenty-two circuits. Comsat argues that the Commission's grant of RCA Americom's proposed system would encourage other domestic satellite system operators to seek to do the same thing. Further, the Commission's domestic open skies policy would enable new entities to establish domestic satellites and then seek authority to use part of their capacity for international service. In this regard, Comsat reminds the Commission of the many U.S. domestic satellite systems whose antenna beam patterns cover various parts of Latin America. Finally, Comsat contends that RCA Americom fails to address the national and foreign policy implications of its proposal. Comsat states that grant of the instant application would lead to serious tensions in international communications, diminish the U.S. leadership role in INTELSAT and reduce U.S. credibility as a strong proponent of INTELSAT.

9. ISI, in its petition to deny, states that grant of the RCA Americom modification application would be violative of Section 309(d)(1) of the Communications Act of 1934 in that such a grant would disserve the public interest. ISI first argues that approval of the proposed modification would be inconsistent with the rationale for grant of Satcom VI advanced by RCA Americom and relied upon by the Commission. ISI states that the initial authorization of Satcom VI was premised on RCA Americom's representation that it had firm customer requirements for the domestic capacity to be placed in orbit. In the modification application, ISI notes that RCA Americom does not demonstrate that it has firm customer requirements for the twelve transponders it wishes to use for international services. ISI adds that because RCA Americom already has four

operative Satcoms in orbit and holds authorization for three Ku band satellites, it is obligated to meet the high standard of customer need which applies to existing operators seeking to expand capacity. Second, ISI contends that the proposed spacecraft modifications are not the kind contemplated by the Commission's traditional liberal policy toward post-authorization spacecraft modifications. ISI argues that the proposed modifications amount to a fundamental alteration in the design and mission of the satellite and would permit RCA Americom to supply a wholly new and different class of service both in policy and geographic terms. Moreover, Satcom's assignment to 67 degrees West Longitude might well have been challenged by other domestic applicants who believed their purely domestic proposals should have a higher priority for the orbital slot at issue. ISI avers that the RCA Americom's proposal, in effect, constitutes a late-filed new spacecraft application. As such, it should be processed only after the existing applications filed on the filing deadline, November 7, 1983, have been processed, and should be granted only if there remains any orbit/spectrum resource available for the RCA Americom proposal to serve U.S.-European and African markets. Third, ISI argues that grant of the modification application is barred by the domestic satellite processing policy now in effect. The RCA Americom application was not on file at the established cut-off date, November 7, 1983. RCA cannot be relieved of the November 7th cut-off date because its application is for modification of a previously authorized satellite and the proposed modification entails fundamental changes. Finally, ISI contends that grant of RCA Americom's application would be inequitable to ISI and would breach sound principles of application processing. ISI asserts RCA Americom seeks to ride on Orion's and ISI's coat tails with respect to U.S.-to-Europe service by taking advantage of the policy review initiated. ISI states that approval of RCA Americom's application concurrently with those of ISI and Orion would contravene Commission policy providing that innovative service proposals must be given some reasonable opportunity to succeed in the market before reactive filings of other carriers are allowed to take effect. Accordingly, states ISI, RCA Americom's application should be rejected without prejudice to its being refiled for consideration as an initial application entirely for international service, or for mixed domestic and international service.

10. Western Union, in its petition to deny, objects to modification applications of domestic satellite grantees, including RCA Americom, that would alter satellite design in a significant way. Western Union notes that its own attempt to effect a satellite substitution for an authorized facility (Advanced Westar) was rejected by the Commission on the grounds it was late-filed. Because Western Union was denied the opportunity to make major changes, Western Union argues that the principle of even-handed

treatment of domestic satellite grantees requires that RCA Americom's proposed modifications be denied.

11. AT&T, in its comments, asks that the Commission consider sensitive foreign communications policy issues and the imperative of fair treatment for all other applicants. AT&T states that the pending proposal also involves potentially significant domestic issues, specifically in the realm of the competitive consequences of domestic satellite positioning. First, argues AT&T, RCA Americom does not meet the test set forth in the Commission's *Transborder* case since INTELSAT's existing system directly parallels the proposal. Second, AT&T requests that, if RCA Americom's application is granted, the Commission clearly state that should RCA Americom's perceived market not develop as RCA Americom expects, the Commission will not entertain any request by RCA Americom to compel common carriers to use any spare capacity in its system. To do otherwise, argues AT&T, would be to insulate RCA Americom from the risks of its proposed business venture. Moreover, states AT&T, the Commission should consider the pending separate satellite system applications on an equal basis. Further, AT&T recognizes that RCA Americom holds a valuable economic benefit that is limited in availability, that of a domestic satellite position on the fringes of the domestic arc that is also potentially useful for international service. RCA Americom could thus have the opportunity to achieve more optimal fill of its satellite capacity by adding high volume Western European traffic. Finally, AT&T urges that the Commission consider the RCA Americom application simultaneously with the other pending separate satellite systems applications.

12. Orion argues that RCA Americom's application should not be processed simultaneously with that of Orion. Orion contends that RCA Americom intends to permit its transponder capacity to be used for the same kind of switched international voice and record traffic that constitutes that bulk of traffic carried on the INTELSAT system. Orion states that it is unfair to place the two applications in the same processing track in that Orion's was filed over one year prior to RCA Americom's.

13. USSC supports RCA Americom's application and argues that grant of the application will increase the volume and exchange of news, sports, informational and entertainment programming between the United States and Europe and Africa. The public will have available to it diverse new services, an additional source for existing service and the overall benefits of competition, thereby helping to put a downward pressure on rates.

14. CBS states that it supports the entry of additional space segment service providers for transatlantic communications as serving both the public interest and marketplace needs. CBS expresses concern that the projected growth in voice and data traffic will seriously limit the

INTELSAT capacity available for wide band video and associated audio transmissions at affordable prices. CBS notes that there is no assurance that INTELSAT will have sufficient transborder capacity to accommodate CBS', as well as other users', growing wide band requirements when CBS' current five year full period leased service expires.

15. In addition to these pleadings, the Commission has received many letters from signatories to INTELSAT expressing concern that possible changes in United States policy regarding competing international satellite systems would not be consistent with the United States' legal commitments to INTELSAT. These letters claim that the competing systems propose to concentrate their services in the high traffic routes in the North Atlantic Basin and, in effect, receive high earnings while meeting the requirements of a small number of large users. For INTELSAT, it is argued, this would result in the loss of large traffic trunks and would significantly reduce the revenues available to meet its capital investment requirements and hold down rates throughout the world. Such a change in U.S. policy would negatively impact all users of INTELSAT, in particular, the people in small and developing countries. Also expressed is the concern that United States approval of any of the pending applications would lead to a proliferation of other U.S. satellite systems intending to carry public international telecommunications traffic in direct competition with INTELSAT which, in turn, would encourage other INTELSAT members to make similar authorizations.

16. RCA Americom, in its opposition to Comsat's petition to deny, refers the Commission to the comments in the oppositions to deny filed by Orion and ISI as well as in RCA Americom's application rather than reargue the issues here. RCA Americom reiterates its claim that only a small portion of its capacity will be used for commercial purposes whereas INTELSAT plans eight or more satellites capable of providing commercial service in the Atlantic region. Thus, argues RCA Americom, the proposed service will not cause INTELSAT significant economic harm. RCA Americom then states that the definition of "regional" as used by Comsat is not immutable and that the community of interests of the United States, Western Europe and Africa may make the countries more of a region than geographic separation prevents them from being a region. RCA Americom also contends that whether future applications for separate satellites might be filed, granted and, together with RCA Americom, cumulatively cause significant economic harm to INTELSAT is irrelevant to RCA Americom's immediate application. RCA Americom avers that it would be contrary to the public interest for the Commission to deny an otherwise meritorious application on the basis of speculative claims of competitive injury, even to INTELSAT.

17. In response to ISI's petition to deny, RCA Americom states that while it is technically feasible for RCA Americom to provide service from Europe to the United States on twelve transponders, this is not the authority requested. RCA Americom also states that it never claimed to have "firm customer requirements" for service but that it did, and does, have foreseeable customer needs which will fully utilize a sixth in-orbit satellite. RCA Americom adds that it expects the limited amount of capacity for international service on Satcom VI to be quickly utilized. With regard to modification of satellite design, RCA Americom argues that these changes will not: (1) cause any new or additional interference with other systems; (2) have any impact upon the Commission's orbital assignment plans; and (3) require any change in allocated frequency bands. Thus, contends RCA Americom, there is no reason to require that this application be processed after the November 7, 1983 cut-off applications. In response to Western Union's petition to deny, RCA Americom states that the changes it proposes to Satcom VI in no way substitute a new satellite for Satcom VI, nor can they be regarded as substantial in nature.

18. In response to Orion's comments, RCA Americom reiterates that all separate systems applications should be treated evenhandedly and concurrently by the Commission and that the other applicants will not be prejudiced in this respect. In response to AT&T's comments, RCA Americom acknowledges that it is cognizant of the policy concerns raised by AT&T and that grant of the authority requested will be completely consistent with those concerns.

III. Discussion

19. RCA Americom's application is one of six applications that have been filed to construct and operate international satellite systems separate from INTELSAT. At the request of the Departments of State and Commerce, the Commission has refrained from taking final action on the proposal until such time as the Executive branch could analyze the applications' impact on the national interest and foreign policy of the United States.[5] On November 28, 1984, President Reagan signed a Presidential determination that alternative satellite systems are "required in the national interest" within the meaning of Sections 102(d) and 201(a) of the Communications Satellite Act of 1962, subject to certain limitations.[6] The Departments of State and Commerce, at the direction of the

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[5] Letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, and Diana Lady Dougan, Coordinator, International Communications and Information Policy, to Chairman Fowler, in FCC File No. CSS-83-002-P, dated April 6, 1983; letter from David J. Markey, Assistant Secretary-Designate for Communications and Information, to Chairman Fowler, dated August 26, 1983.

[6] Presidential Determination 85-2, filed in CC Docket No. 84-1299, (November 28, 1984).

President, jointly informed the Commission of the Presidential determination and the criteria necessary to ensure that the United States meets its international obligations.[7] The limitations set forth by the Executive branch require, first, that each system be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public-switched message networks (except for emergency restoration service), and, second, that one or more foreign authorities authorize the use of the proposed system and enter into consultation procedures with the United States under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm.

19. The Presidential determination satisfies the requirement for a threshold finding under the Communications Satellite Act that the proposed separate systems are "required in the national interest." The Presidential determination, however, is a general policy decision and is not intended to decide which, if any, applications now before the Commission should be granted. Therefore, the Commission's task is to establish a policy for regulatory consideration of the applications and to determine whether any of the proposed systems should be licensed under the public interest standard of the Communications Act of 1934 consistent with the Presidential determination.

20. We initiated an inquiry and rulemaking in CC Docket No. 84-1299 to solicit data and analyses regarding issues that have arisen in connection with the applications. In that proceeding, we considered the potential public benefits of authorizing the proposed systems, the economic impact of the systems on INTELSAT, and their effect on consumer service providers and equipment manufacturers. In addition, we considered legal, technical and policy issues that must be taken into account in considering the applications. Further, from a regulatory perspective, we considered unresolved questions concerning the scope and applicability of the Executive branch's proposed limitations.[8]

21. In our *Separate Systems* decision in CC Docket No. 84-1299, we have today concluded that the establishment of separate satellite systems will result in substantial benefits to users of international satellite communications services.[9] Separate systems will provide currently unavailable service enhancements to users with special communications needs, stimulate technological innovation and services development im-

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[7] Letter from George P. Schultz, Secretary of State, and Malcolm Baldridge, Secretary of Commerce, to Chairman Fowler, in CC Docket No. 84-1299 (dated November 28, 1984).

[8] Establishment of Satellite Systems providing International Communications, Notice of Inquiry and Proposed Rulemaking, 50 Fed. Reg. 1570 (released January 4, 1985) (hereinafter referred to as the "*Separate Systems*" Notice).

[9] Separate Systems, Report and Order, FCC 85-399 (released 9/3/85).

prove of network efficiencies, reduce user-costs, and contribute to the creation of new business and trade opportunities. We have further concluded that authorization of separate satellites subject to the Executive branch limitations provides reasonable assurance that INTELSAT will avoid significant economic harm from the entry of new suppliers. In reaching these conclusions, we have addressed and resolved issues which were raised in response to RCA Americom's and other applications. We thus find it unnecessary to address these same issues in the instant order. Here, we will determine whether RCA Americom's application is consistent with the limitations, whether the applicant has the requisite legal, financial and technical qualifications under Title III of the Communication's Act, and whether grant of the application otherwise satisfies the public interest standard of the Communications Act, and we will address any outstanding issues particular to this application. We believe that our decision here along with our decision in CC Docket 84-1299, adopted today, is fully dispositive of all issues and arguments raised with respect to RCA Americom's application.

Consistency With Executive Branch Service Restrictions

22. As we have discussed in our *Separate Systems* decision, the purpose of the Executive branch restrictions is to avoid significant economic harm to INTELSAT. Through these service limitations, INTELSAT's "core" revenues obtained from supplying space segment capacity for international switched-message services would be protected from diversion by entry of new suppliers. According to the Executive branch restrictions, separate systems are to be ". . . restricted to providing services through the sale or long-term lease of transponder or space segment capacity for communications not interconnected with the public switched-message networks." However, we found it necessary in our *Separate Systems* decision to clarify and further develop the Executive branch service restrictions to assure that they are understood by all parties and can be implemented from a regulatory standpoint.

23. We have determined that no communications provided over separate satellite system space segment capacity may interconnect with the public switched facilities common carriers to provide switched-message services such as MTS, telex, TWX, telegraph, teletext facsimile and high speed switched data service. In addition, we have decided to apply the "no interconnection" and "sale and long-term lease" restrictions not only to separate system operators, but also to all levels of users of the facilities. And, in view of the "sale and long-term lease" requirement, separate system licensees may not operate as common carriers. Finally, we have determined the following: (1) there is no need to establish a minimum unit of space segment capacity which a separate systems must

provide; (2) the minimum lease period for the "long-term lease" of capacity is to be one year; (3) space segment capacity may be obtained and resold by common carriers and enhanced service providers to provide communications services not interconnected with any public switched message network; and (4) there is no basis to establish a "sunset" date for the Executive branch service restrictions absent a finding from the Executive branch that they are no longer necessary to fulfill U.S. international obligations.

24. RCA Americom's application is consistent with the Executive branch restrictions except in one respect. RCA Americom proposes to offer its international satellite capacity on a tariffed, common carrier basis and make available on a non-common carrier basis whole transponders for commercial customers, such as common carriers and international record carriers, with high capacity requirements. Based upon the aforementioned restrictions, we find that RCA Americom is barred from the provision of its proposed common carrier services and that its Section 214 application for authority to provide such services must be denied. RCA Americom must provide all of its space segment capacity through sale or long-term lease as defined in our *Separate Systems* decision. Common carriers and enhanced service providers may obtain RCA Americom's space segment capacity to provide services that do not require interconnection with public switched message networks. Finally, all the restrictions concerning interconnection and "sale and long-term lease" practices apply not only to RCA Americom but to all levels of users of its facilities.

Legal and Financial Qualifications

25. We essentially found RCA Americom's financial and legal qualifications to operate this satellite, in its current, unmodified form "as a matter of record before the Commission" when we authorized RCA Americom to construct, launch and operate its Satcom VI satellite.[10] The proposed modification, including switches, power networks and feed horns, is expected to increase by approximately $700,000 the $80 million investment cost for Satcom VI.[11] Thus, on the basis of our analysis of RCA Americom's original application to construct, launch and operate the Satcom VI, as supplemented by its application to modify, we find RCA Americom to be legally and financially qualified to modify, the Satcom VI

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[10] RCA American Communications, Inc., 94 FCC 2d. 441, FCC 83-192 (1983).

[11] RCA Americom's application, File No. 604-DSS-P/LA-82 (December 28, 1981), at 8, sets out the investment and operating costs of the (original) Satcom VI as follows: investment cost approximately $80 million (satellite at $28.8 million; launch, including support services and insurance at $48.0 million; TT&C at $0.5 million; and engineering support at $2.7 million) and operating costs, including incentive payments, insurance and TT&C services, at approximately $2.1 million per year.

to provide international communications satellite services on command on six transponders.

26. In view of RCA Americom's having met the requisite first and second stage financial qualifications, we are issuing RCA Americom a construction permit to begin modification of its Satcom VI. RCA Americom bears all risks and liabilities in commencing modification of its satellite pending issuance of a final Commission license to begin operation. Such final license will not be issued until the Commission has been notified of the completion of the Article XIV(d) process.

Technical Qualifications

27. We have evaluated the additional space station facilities proposed in RCA Americom's modification to provide a beam to Europe and Africa. We find that although they do not meet the standards for full frequency reuse adopted in our *Separate Systems* decision, they are acceptable under the special provisions for "low capacity beams." As such, our policy that the Commission may order such beams turned off if the assigned frequencies are needed for a full capacity satellite providing service to the same area, from the same (or a nearby) orbital position, applies in this case. We also find that the facilities will be consistent with the implementation of our 2°-spacing policies by virtue of the initial authorization of the space station for domestic service. It appears that in all other respects, the Europe/Africa beam can be operated in a manner consistent with Commission rules and the International Radio Regulations.

Other Issues

28. With regard to the petitions to deny filed by Comsat, ISI and Western Union, we find that on the basis of the record compiled in both this proceeding and the *Separate Systems* docket that those petitions present no factual allegations to show that grant of RCA Americom's application would be inconsistent with the public interest, convenience and necessity under Section 309(a) of the Communications Act of 1934. Therefore, pursuant to Section 309(d) of the Communications Act and Section 63.52(c) of the Commission's rules, 47 C.F.R. 63.52(c) we deny these petitions to deny.

29. With regard to AT&T's request that the Commission clearly state that it shall disregard any requests of RCA Americom to compel common carriers to use spare capacity in its system should its application be granted, we find such a request unwarranted by the present circumstances. We agree that RCA Americom should not be guaranteed any market share or services. We conditionally authorize RCA Americom's proposed system without any guarantee of traffic from U.S. international common carriers or other sources. It shall be this Commission's policy that any such private systems succeed or fail on their own merits and not through

Commission action that would guarantee common carrier use of the systems.[12] At the same time, we determined in our Separate Systems decision not to prohibit common carrier use of the systems and will consider any proposed common carrier purchase of capacity in the context of our normal facility planning and authorization procedures. We took this same approach in authorizing private international submarine cable systems.[13]

Public Benefits

30. On the basis of our analyses in our *Separate Systems* decision, we have found that, with respect to the type of information transmitted, the services now offered or planned by INTELSAT are generally comparable to those proposed by RCA Americom, such as video, audio and data transmission services. We have also found several crucial differences between RCA Americom's proposed services and the services offered or planned by INTELSAT. First, with regard to satellite downlink power, we find that INTELSAT, as a general matter, cannot equal RCA Americom in achieving combinations of earth station size, transmission rates, connectivity user control, security and costs that may be described by a user with special needs. Second, with regard to coverage and connectivity of satellites providing customer-premises services, we find that RCA Americom's proposed network far exceeds that of INTELSAT. Third, RCA Americom proposes to sell and lease its space segment capacity whereas INTELSAT, which is permitted to sell its transponder capacity, only leases it. RCA Americom's proposal to sell or lease space segment capacity on a non-tariffed basis will provide international users with the same benefits that domestic users have enjoyed as a result of the Commission's Domestic Transponder decision.[14] Private sale of space segment capacity will: (1) permit the providers of capacity to make tailored and flexible arrangements with customers that are not possible under the regimen of a tariffed service offering, (2) enable customers to make long-term plans for the use of facilities with assurance as to facility availability and price, (3) permit systems to be specifically designed to customer needs, and (4) result in positive market development for new and innovative service offerings. We found in our *Separate Systems* decision, as we did in authorizing private submarine cable facilities,[15] that users with bulk capacity needs for special service requirements for international services should enjoy the same benefits.

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[12] *See* Tel-Optik Limited, *et al.,* FCC 85-89 (released April 5, 1985).

[13] *Ibid.*

[14] Domestic Fixed-Satellite Transponder Sales, 90 FCC 2d 1251 (1982), *aff'd sub nom.,* Wold Communications, Inc. v. FCC 735 F.2d 1465 (D.C. Cir. 1984).

[15] Tel-Optik Limited, *et al.,* FCC 85-99 (released April 5, 1985).

31. We believe that authorization of RCA Americom's proposed separate system will provide those benefits to users of international currently unavailable service enhancements to users with special communications needs, stimulate technology and service development, and reduce user-costs. In addition, RCA Americom's proposed system will offer to customers alternative suppliers to fulfill their special needs. We further believe that applying competitive pressure to INTELSAT within the limited service area outlined above will result in the further development of this market and encourage service innovation. Based on the fact that RCA Americom's services will be limited within the confines of the Executive branch restrictions, and in view of our findings in our *Separate Systems* decision, we find here that RCA Americom's proposed system will not cause significant economic harm to INTELSAT.

32. Accordingly, IT IS ORDERED, pursuant to Sections 154(i) and (j), 308, 309 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151 - 319 (1976), that application File No. 604-DSS-P/LA-82 IS GRANTED, and RCA American Communications, Inc. IS CONDITIONALLY AUTHORIZED to modify its previously authorized Satcom VI domestic satellite in accordance with the terms, conditions, and technical specifications set forth in its application and the formal instruments of authorization to be issued at a later date.

33. IT IS FURTHER ORDERED that application File No. I-T-C-84-085 IS DENIED.

34. IT IS FURTHER ORDERED that final authorization for operation of the Satcom VI European and African beams shall not be issued unless and until: (1) one or more foreign authorities authorize use of the system and enter into consultation procedures with the United States Party under Article XIV(d) of the INTELSAT Agreement to ensure technical compatibility and to avoid significant economic harm; and (2) the Department of State informs the Commission that the United States has completed its Article XIV(d) obligations and that the Commission may proceed with final authorization of the proposed system.

35. IT IS FURTHER ORDERED that as a condition of this order RCA Americom must file with the Commission copies of any operating agreements entered into by RCA Americom within 30 days of execution.

36. IT IS FURTHER ORDERED that the operation of RCA Americom's proposed European and African beams is to be restricted to providing services through the sale or long-term lease of transponders or space segment capacity for communications not interconnected with public switched message networks (except for emergency restoration service).

37. IT IS FURTHER ORDERED that the Commission shall retain jurisdiction over the use of all space segment within the proposed system

to ensure compliance with the service restriction stated in paragraph 36 above.

38. IT IS FURTHER ORDERED that RCA Americom may begin modification of its Satcom VI satellite on the effective date of this order.

39. IT IS FURTHER ORDERED that the temporary assignment of frequencies for the Satcom VI Europe/Africa Beam at the assigned orbital position is subject to change by summary order of the Commission on 30-days notice and does not confer any permanent right of the use of the orbit or spectrum. Such a change may be ordered, *inter alia,* in the event that the national security or the public interest so requires, or to implement any of the objectives or policies set forth in today's Report and Order in CC Docket No. 84-1299, FCC-85-399. Neither this authorization, nor any right granted by this authorization, shall be transferred, assigned or disposed of in any manner, voluntarily or involuntarily, or by transfer of control of any corporation holding this authorization, to any person except upon application to the Commission and upon a finding by the Commission that the public interest, convenience and necessity will be served thereby.

40. IT IS FURTHER ORDERED that RCA Americom shall comply with the Report and Order adopted today in CC Docket No. 84-1299.

41. IT IS FURTHER ORDERED that the petitions to deny filed by Communications Satellite Corporation, International Satellite, Inc., and Western Union Telegraph Co. ARE DENIED.

42. IT IS FURTHER ORDERED that the request of AT&T Communications, Inc. that the Commission clearly state herein that, should RCA Americom's application be granted, the Commission will not entertain any future request of RCA Americom to compel carriers to use its spare space segment capacity, IS DENIED.

43. RCA American Communications, Inc. is afforded 45 days from the release date of this order to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

*See FCC 85-398, in this volume, for Appendix A.

Comparative Issue, Contingent
Frequency, Equitable Distribution of under 307(b)
Ownership and Management, Integration of
Transmission, First Local

> **Applicant that would bring first local transmission service to community of 752 is not entitled to dispositive Section 307(b) preference over applicant that would bring first competitive service to a community of 2627. Fully integrated applicant has dispositive integration preference over applicant credited with 25% full-time and 37.5% part-time integration credit, regardless of any qualitative enhancement factors.**
> —*Ruarch Associates*
> MM Docket No. 83-843

FCC 85-503

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In re Applications of	
Arthur D. Stamler and Virginia I. Stamler d/b/a Ruarch Associates Woodstock, Virginia	MM Docket No. 83-843 File No. BPH-820331AH
All Kountry Music Broadcasters, a Partnership Edinburg, Virginia	MM Docket No. 83-845 File No. BPH-820908AH
For Construction Permit for a New FM Station	

MEMORANDUM OPINION AND ORDER

Adopted: September 11, 1985; Released: September 18, 1985

BY THE COMMISSION: COMMISSIONER RIVERA NOT PARTICIPATING.

1. Ruarch Associates (Ruarch) and All Kountry Music Broadcasters (All Kountry) have filed mutually exclusive applications for authority to construct a new FM station on Channel 240A at Woodstock and Edinburg, Virginia, respectively. In a Decision (FCC 84R-73, 99 FCC 2d 338, released

October 18, 1984) the Review Board reversed the Initial Decision (FCC 84D-25, 99 FCC 2d 345, released April 17, 1984), granted Ruarch Associates' application for a new FM station at Woodstock, and denied All Kountry's mutually exclusive application for a new FM station at Edinburg, Virginia. Now before the Commission are: (a) an Application for Review of the Review Board's Decision, refiled on January 7, 1985, by All-Kountry Music Broadcasters;[1] (b) Motion of Good Cause to Accept Late Refiled Application for Review, filed January 7, 1985, by All-Kountry Music Broadcasters;[2] (c) Opposition to Application for Review, filed December 4, 1984, by Ruarch Associates; (d) Supplement to Application for Review and Motion for Leave to File, filed December 19, 1984, by All-Kountry Music Broadcasters;[3] and (e) Motion to Terminate Proceeding, filed December 31, 1984, by Ruarch Associates.[4]

2. Having examined the contentions of the parties, we agree with the Board's result in this case. Like the Board, we discern no significant Section 307(b) choice between All Kountry's proposal to bring a first local transmission service to Edinburg (pop. 752) and Ruarch Associates' proposal to bring a second such service to the larger community of Woodstock (pop. 2,627). We note that Edinburg and Woodstock are separate communities,[5] located approximately five miles apart, and that

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[1] By Order, FCC 84I-129, released December 14, 1984, the General Counsel, acting under delegated authority, dismissed All-Kountry's November 19, 1984 Application for Review subject to its being refiled in proper form within five days.

[2] All-Kountry claims that the General Counsel's Order dismissing its Application for Review as not delivered until after Christmas, that counsel was out of town from December 26 to December 29 on business and that he did not receive the Order until January 2, 1985. Under these circumstances we believe that good cause has been demonstrated.

[3] All-Kountry relies on the Board's Decision in *Santee Cooper Broadcasting Co.*, FCC 84R-87, 99 FCC 2d 781, released December 7, 1984. On December 31, 1984, Ruarch Associates filed a Motion to Strike All-Kountry's Supplement to Application for Review. All-Kountry filed an Opposition to the Motion to Strike on January 7, 1985. Since All-Kountry relies on a recent Review Board Decision which addresses an issue related to the issue raised here, we will deny the motion to strike and accept the supplement.

[4] All-Kountry filed an Opposition on January 7, 1985. Ruarch Associates relies upon the fact that All-Kountry had failed to refile its dismissed Application for Review. Since All-Kountry resubmitted its Application for Review on January 7, 1985, and since it has demonstrated good cause for its failure to do so in a more timely fashion, we will deny Ruarch Associates' Motion to Terminate proceeding.

[5] Both Woodstock and Edinburg are incorporated. *Cf. FM Assignment Policies and Procedures*, 90 FCC 2d 88, 101 (1982). Edinburg has its own Chamber of Commerce, Police and Volunteer Fire Departments and is part of the Shenandoah County Public School System. It owns and operates its own water treatment and distribution system. There are 33 places of businesses, three churches, one dentist and a part time library in Edinburg. Major employers located within the town limits of Edinburg include the U.S. Forest Service, Alumo Products, Inc. and the Shenandoah Telephone Company. Farmers Bank has its main office in Edinburg. Woodstock is the county seat of Shenandoah

the applicants stipulated at oral argument that their respective engineering proposals will yield no significant differences in the areas and populations covered or the number of services available. This stipulation mooted the efficiency aspect of the Section 307(b) issue, and therefore the only question is whether either community has a greater need for a local FM broadcast outlet.

3. Since every community of appreciable size is presumed to need at least one station for local self expression,[6] Edinburg, with no licensed transmission service, would presumptively have a greater need for service than Woodstock. However, we have never found that a community as small as Edinburg is appreciable enough to take advantage of this presumption[7] in a multiple party proceeding.[8] Moreover, the presumption

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County. It has its own Volunteer Fire and Police Departments. The Shenandoah County Memorial Hospital, as well as two private longterm health facilities, and the County Public Library are located in Woodstock. Woodstock has an elementary school, a middle school, a high school and a private academy. Twenty-three churches are located in Woodstock. Major employers include the County government, Blue Bell Apparel Manufacturer, Woodstock Manufacturing Company, First Virginia Bank and Safeway.

[6] *Plainview Radio*, 24 FCC 405, 421 (1958); *Bie Broadcasting Co.*, 81 FCC 2d 1, 26 (Rev. Bd. 1980), *review denied*, FCC 81-376, released July 31, 1981; *Beaufort County Broadcasting Co.*, 94 FCC 2d 572 (Rev. Bd. 1983), *review denied*, FCC 84-184, released June 19, 1984, *appeal pending, Beaufort County Broadcasting Co.* v. *FCC*, No. 84-1265 (D.C. Cir. June 25, 1984).

[7] Notwithstanding All-Kountry's contention, the Review Board's recent decision in *Santee Cooper Broadcasting Co.*, FCC 84R-87, 57 RR 2d 662, released December 7, 1984, does not support the award of a dispositive 307(b) preference to All-Kountry. There four applicants proposed to serve Hilton Head (pop. 11,344), which already had two co-owned broadcast stations, and the fifth applicant proposed to bring a first local transmission service to the nearby community of Bluffton (pop. 541). The Board found that both communities were entitled to be considered under Section 307(b) as appreciable communities, but that no Section 307(b) preference was due any applicant because Bluffton's presumptive need for a first local transmission service did not outweigh Hilton Head's need for a first competitive broadcast "voice."

[8] *See Southern Indiana Broadcasters, Inc.*, 24 FCC 521, 531 (1958), where we questioned but did not decide, whether a community of 1324 persons is appreciable enough to benefit from the local transmission doctrine in a comparative proceeding. *Compare Musical Heights, Inc.*, 29 FCC 1, 4 (1960), where we concluded that a town with 660 persons was a separate community within Section 307(b), and that it was entitled to a station because "irrespective of the 'local transmission' needs of Braddock Heights, the overall need for the proposed station has been established," and because no other applicant claimed that it could make a more fair, equitable and efficient use of the frequency elsewhere. In doing so, we distinguished *Musical Heights* from our earlier opinion in *Southern Indiana*. As we explained in *Musical Heights*, the smaller community of 1324 in *Southern Indiana* clearly would have received a grant if no applicant had proposed a more fair, equitable or efficient use of the frequency elsewhere because the need for the proposed station was established. In this regard the applicant proposing to serve the community of 1324 persons lost in *Southern Indiana* because its opponent proposed first local service to a community of 6328 persons. In a related context we have indicated that rulemaking proceedings which deal solely with the question of whether a channel should be assigned

in favor of first local transmission service does not result in an automatic Section 307(b) preference. Rather, the relative needs of the competing communities must be evaluated, and any countervailing factors weighed against the presumptive need for at least one local broadcast outlet.[9] Here, Woodstock is the center of commerce and industry in Shenandoah County, and its population increased 12.4% from 1970 and 1980. Woodstock currently has only one licensed broadcast outlet (Station WAMM-AM, fulltime), and the provision of a second local transmission service has been found to be an important public interest consideration.[10] Furthermore, the communities are in close proximity to each other, and both applicants propose to cover the same geographical areas and populations. In view of the small size, relative similarity and close proximity of the communities involved, we cannot conclude that Edinburg's need for first local transmission service exceeds the larger community's need for a first competitive local service. Since we do not find either proposal significantly more efficient, fair or equitable, we will not award either applicant a Section 307(b) preference that would insulate it from further comparison with the other.[11]

4. At the time of the oral argument before the Review Board neither applicant had any media interests, and the Board correctly found that

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to a particular community, do not govern the Section 307(b) determination. *See Campbell and Sheftall,* 7 FCC 2d 658, 667 (Rev. Bd. 1967).

[9] *Bie Broadcasting Co., supra,* 81 FCC 2d at 26. The Board in this case relied upon *Cherokee Broadcasting Co.,* 17 FCC 2d 121 (1969), and *Wilmer E. Huffman,* 32 FCC 1 (1962), to show that the presumption of need for at least one local transmission service can be rebutted by a larger community with existing local transmission service. However, neither case turned exclusively on the transmission aspect of Section 307(b). In both cases the applicant proposing to serve the larger community with an existing local outlet was awarded a Section 307(b) preference because it also proposed to eliminate a significant white area. Since the applicants in this case have stipulated that their engineering proposals will yield no significant differences in areas and populations served or the number of services available, no such claim can be made in this case.

[10] *See Babcom, Inc.,* 27 FCC 2d 437, 438-39 (Rev. Bd. 1971), *set aside on other grounds,* 31 FCC 2d 425 (1971), where the need of a community (pop. 2592) for a second local transmission service was found to outweigh the need of a larger community (pop. 120,096) for a fifth standard and a ninth aural broadcast facility; *Caprock Radio, Inc.,* 28 RR 2d 240 (A.L.J. 1973). *See also WHW Enterprises, Inc.,* 753 F.2d 1132, 1137 (D.C. Cir. 1985), where the court explicitly recognized a community's need for "its first competitive daytime station." *Cf. FM Channel Assignments,* 51 RR 2d 29 (1983), where we refused to make assignments to two communities with populations of less than 1000 because "favoring a second assignment to a large, dynamic community over a first assignment to a very small community is not inconsistent with [our] mandate to assign frequencies in a fair and efficient manner."

[11] *Compare Pasadena Broadcasting Co.* v. *FCC,* 555 F.2d 1046 (D.C. Cir. 1977); and *Miners Broadcasting Service, Inc.* v. *FCC,* 349 F.2d 199 (D.C. Cir. 1965), where the court admonished the Commission for construing Section 307(b) issues so as to exclude one applicant from comparison.

they were equal on diversification. Subsequently, however, Ruarch Associates reported that it had been awarded a construction permit to construct and operate a low power television station in Woodstock, Virginia. By Order, FCC 851-83, released June 24, 1985, the General Counsel, acting under delegated authority, accepted the amendment. Since Ruarch indicated, prior to receiving the low power television grant, that it would dismiss the LPTV application, if the FM application for Woodstock were granted, we will not attribute the LPTV interest to Ruarch for diversification purposes. *See Colorado Television, Inc.*, 56 RR 2d 1080, 1087-88 (Rev. Board 1984), *application for review pending*; *Daytona Broadcasting Co., Inc.*, 55 RR 2d 1326, 1335, n.24 (Rev. Bd. 1984). However, we will condition the grant of Ruarch Associates' application for a new FM broadcast station on the divestiture of its interest in the LPTV permit for Woodstock.

5. ACCORDINGLY, IT IS ORDERED, That the Motion of Good Cause to Accept Late Refiled Application for Review, filed January 7, 1985, by All-Kountry Music Broadcasters IS GRANTED and that the Refiled Application for Review, filed January 7, 1985, by All-Kountry Music Broadcasters IS ACCEPTED.

6. IT IS FURTHER ORDERED That the Motion to Terminate Proceeding, filed December 31, 1984, by Ruarch Associates IS DENIED.

7. IT IS FURTHER ORDERED, That the Motion for Leave to File Supplement to Application for Review, filed December 19, 1984, by All-Kountry Music Broadcasters, IS GRANTED; that the Motion to Strike Supplement to Application for Review, filed December 31, 1984, IS DENIED; and that the Supplement to Application for Review, filed December 19, 1984, by All-Kountry Music Broadcasters IS ACCEPTED.

8. IT IS FURTHER ORDERED, That pursuant to Section 1.115(g) of the Commission's Rules, the Application for Review, supplemented on December 19, 1984 and refiled on January 7, 1985, by All Kountry Music Broadcasters IS DENIED.[12]

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[12] In *Steel* v. *FCC*, No. 84-1176 (D.C. Cir. Aug. 23, 1985) the Court of Appeals for the District of Columbia Circuit set aside our policy of awarding qualitative enhancement credit for integrated female owners. Although the Review Board awarded Ruarch Associates enhancement credit for the proposed participation of its 50% female owner, Virginia Stamler, as full-time station manager/program director/community relations director, *Steel* has no impact on the outcome of this proceeding. Since All-Kountry proposes significantly less than the 100% full-time integration proposed by Ruarch Associates, there is a clear quantitative disparity between the integration proposal of the two applicants. *Absolutely Great Radio, Inc.*, 95 FCC 2d 1023, 1029 (1983), *reversed on other grounds*, Ventura Broadcasting Co. v. *FCC*, 765 F.2d 184 (D.C. Cir. 1985); *New Continental Broadcasting Co.*, 96 FCC 2d 544, 545 (Rev. Bd. 1983), *appeal pending*, *Dadeland Broadcasting Co.* v. *FCC*, No. 85-114 (D.C. Cir. Feb. 22, 1985). Under established Commission practice the clear quantitative advantage that Ruarch has over All-Kountry is dispositive without regard to any qualitative enhancement factors.

9. IT IS FURTHER ORDERED, That any grant of a construction permit to Ruarch Associates in this proceeding will be subject to the condition that Ruarch Associates divests itself of all interest in the permit (No. GL-85-7) to construct and operate a low power television facility in Woodstock, Virginia.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

Alexander S. Klein, Jr., 86 FCC 2d 423, 428-29 (1981); *Van Buren Community Service Broadcasters, Inc.*, 87 FCC 2d 1018, 1022 (Rev. Bd. 1981), *review dismissed*, 50 RR 2d 1433 (1982).

Employment, Equal Employment Opportunity Rule
Reconsideration, Petition for, Denial of

Petition for reconsideration of Texas Broadcast Renewals, FCC 84-494, released October 29, 1984, that imposed a short-term renewal, dismissed and denied. Licensee did not present grounds to justify rescinding the EEO sanctions imposed in the original order. —*S. Plains B/cing Co., Inc.*

FCC 85-363

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In re Application of South Plains Broadcasting Co., Inc.	File No. BR-830331UA
For Renewal of License of Station KFYO Lubbock, Texas	

MEMORANDUM OPINION AND ORDER

Adopted: July 10, 1985; Released: July 19, 1985

BY THE COMMISSION:

1. The Commission has before it a timely-filed petition for reconsideration of its Order in *Texas Broadcast Renewals,*[1] FCC 84-494, 57 R.R. 2d 13 (1984), (hereafter *Order*), by South Plains Broadcasting Co., Inc., licensee of Station KFYO in Lubbock, Texas.[2]

2. In its *Order*, the Commission found that the general absence of minorities on the station's staff was the result of a deficient EEO program. Consequently, KFYO's license was renewed for less than a full term to February 1, 1987, and made subject to reporting conditions in order to assure that more positive efforts would be forthcoming.

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[1] The Order addressed a petition to deny filed by the National Black Media Coalition which alleged that several Texas broadcast stations failed to comply with the Commission's EEO rule.

[2] Of the licensees involved in the *Order*, only South Plains Broadcasting Co., Inc. has petitioned for reconsideration. The National Black Media Coalition has not filed an opposition to the reconsideration pleading.

3. In its petition for reconsideration, the licensee contends that the imposition of both a short-term renewal and reporting conditions is contrary to Commission precedent because lesser sanctions have been imposed on other renewal applicants with similar minority employment profiles, and, unlike other cases, EEO sanctions have never been imposed on KFYO. South Plains Broadcasting Co., Inc., therefore, requests that the Commission reconsider the *Order* and grant the license of KFYO for the full license term.

4. Reconsideration is appropriate where the petitioner shows either a material error or omission in the original order or raises additional facts not already considered. *E.g., WWIZ, Inc.*, 37 F.C.C. 685, 686 (1964), *aff'd sub nom. Lorain Journal Co. v. F.C.C.*, 351 F.2d 824 (D.C. Cir. 1965), *cert. denied*, 383 U.S. 967 (1966); Section 1.106 (c) of the Commission's Rules. Applying this standard, we do not believe that reconsideration of the Commission's *Order* is appropriate. We shall, however, address the licensee's arguments to clarify the record.

5. The licensee initially contends that the imposition of a short-term renewal on KFYO is not in accord with Commission decisions where lesser sanctions were imposed on other renewal applicants with similar minority employment profiles. The licensee's argument is without merit. As we have repeatedly stated, the determinative factors in our evaluation of a station's employment practices have always been the thoroughness of its EEO program and the good faith efforts undertaken to make the program work. We have consistently refused to rely solely on a mechanical comparison of the percentage of minorities on a licensee's staff to their percentage in the labor force.[3] *E.g., Storz Broadcasting Co. & WIL Music Inc.*, 88 F.C.C. 2d 641, 643 (1981). In this regard, KFYO's employment statistics revealed that, although the station is located in an area with a significant minority population, few minorities had worked at the station during the entire license term. In addition, KFYO's EEO program showed

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[3] The licensee also asserts that the retroactive application of 1983 labor force data to KFYO's 1981 and 1982 employment profiles would constitute independent error because it should not be expected to meet goals in 1981 and 1982 which were not established until 1983. However, the licensee misconstrues the Commission's policy regarding the application of the EEO processing guidelines. In order to expedite the processing of renewal applications, the Commission adopted procedures (*Public Notice*, 46 R.R. 2d 1693 (1980)) for reviewing licensee's EEO efforts. Further information on the use of these guidelines is contained in *EEO Processing Guidelines*, 79 F.C.C. 2d 922 (1980). These procedures allow the Commission's limited staff to perform a detailed review of only those renewal applicants whose employment profiles raise a question of possible noncompliance with the agency's affirmative action policies. *Id.* at 925. Thus, the statistical comparison of a licensee's employment profile to the available minority labor force is significant primarily as an initial frame of reference. Assuming arguendo that the application of the 1983 labor force data was wrong, the licensee fails to demonstrate how the use of those data worked to its detriment.

that the three minority recruitment sources contacted produced no referrals, and that despite ample hiring opportunities during the year prior to the submission of the renewal application, only one of the twenty-two persons hired was a minority. The licensee's argument does not take into account the noted deficiencies in KFYO's EEO program, nor does it consider the EEO efforts of other renewal applicants. Therefore, an evaluation of the sanctions imposed on KFYO and on other renewal applicants based solely on the recitation of the stations' employment profiles is meaningless.

6. The licensee also argues that the short-term renewal of the KFYO license was contrary to Commission precedent in that EEO sanctions had never been imposed on KFYO and evidence of intentional discrimination was not found.[4] In this regard, it maintains that the imposition of a short-term renewal has been resorted to only if a licensee's minority employment profile fails to improve after reporting conditions have been imposed. The licensee is incorrect. The Commission has held on several occasions that a station's deficient EEO program standing alone, may warrant renewal for less than a full term. *See, e.g., Louisiana/Mississippi Broadcast Renewals, supra* note 4 at 283-84; *KHVH, Inc.*, 77 F.C.C. 2d 890, 894 (1980); *Christian Broadcasting Association, 77 F.C.C. 2d 858, 861 (1980); Shamrock Development Corp.*, FCC 79-351, 45 R.R. 2d 1319, 1320 (1979); *Sande Broadcasting Co., Inc.*, 58 F.C.C. 2d 139, 145-48, *recon. denied*, 61 F.C.C. 2d 305 (1976). Given the above, we find that KFYO's record continues to warrant the EEO sanctions originally imposed in the *Order*.

7. Accordingly, IT IS ORDERED, That the petition for reconsideration filed by the South Plains Broadcasting Co., Inc. IS DENIED.

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[4] The licensee seems to believe that the Commission's finding that evidence of intentional discrimination was nonexistent precluded the imposition of a short-term renewal. However, Section 73.2080 of the Commission's Rules requires that broadcast licensees refrain from employment discrimination and implement an equal employment opportunity program. Therefore, our finding of nondiscrimination has no bearing on our determination that KFYO's faulty EEO program warranted a short-term renewal. *See KDEN Broadcasting Co.*, FCC 84-159, 55 R.R. 2d 1311, 1314, *recon. denied*, FCC 85-214, released April 30, 1985; *Louisiana/Mississippi Broadcast Renewals*, 94 F.C.C. 2d 275, 283-86 (1983). Indeed, had we found evidence of intentional discrimination, it may have been necessary to conduct a hearing to determine whether grant of the application would serve the public interest. *Bilingual Bicultural Coalition on Mass Media, Inc. v. F.C.C.*, 595 F.2d 621, 629 (D.C. Cir. 1978).

8. IT IS FURTHER ORDERED, That the Mass Media Bureau send, by Certified Mail - Return Receipt Requested, a copy of this Memorandum Opinion and Order to each of the parties to this proceeding.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

Educational Institution
Educational Noncommercial TV Station, Eligibility

> Application for review denied. Where applicants are not educational institutions, do not show how they would advance educational programs, and do not have governing boards representative of educational, cultural, and civic groups in the community, they are ineligible for a reserved frequency. Noncommercial educational organizations and institutions, even though religiously oriented, can apply for reserved broadcast channels if they make an appropriate showing as to their qualifications.
> —*Way of the Cross of Utah, Inc.*

Constitution First Amendment

> Where religious entities failed to demonstrate their qualifications for reserved channels and applications were therefore dismissed, there was no abridgment of the free exercise clause of the first amendment.
> —*Way of the Cross of Utah, Inc.*

Educational Noncommercial TV Station, Eligibility FCC Forms

> Despite recent changes in FCC Form 340 for noncommercial educational TV stations, new applicants will still be required to show that their governing boards are representative of educational, cultural, and civic groups in the community.
> —*Way of the Cross of Utah, Inc.*

FCC 85-253

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In re Applications of	
Way of the Cross of Utah, Inc. Ogden, Utah	File No. BPET-831021KF
Way of the Cross of Odessa, Inc. Big Spring, Texas	File No. BPET-840105KF
For Construction Permits	

MEMORANDUM OPINION AND ORDER

Adopted: May 9, 1985; Released: June 4, 1985

BY THE COMMISSION:

1. This proceeding primarily involves the issue as to whether the applicants have met their burden to establish that they are qualified to operate television broadcast stations on channels reserved for educational, noncommercial use. Way of the Cross of Utah, Inc. (Way/Utah) sought a construction permit for a new noncommercial, educational television station to operate on reserved channel 9, Ogden, Utah. The Mass Media Bureau found that the applicant had not met its burden, dismissed the application and granted the remaining application for the same channel filed by Weber State College (Weber State).[1] Way/Utah did not seek reconsideration or a stay of the grant of Weber State's application, but it did seek reconsideration of the dismissal of its own application, which the Bureau subsequently denied. In the case of Way of the Cross of Odessa, Inc. (Way/Odessa), the Bureau similarly found that the applicant had not established its eligibility to operate a television station on reserved channel 14, Big Spring, Texas. Way/Odessa filed a petition for reconsideration of that action, which is pending.

2. We now consider Way/Utah's application for review of the Bureau's action, filed September 24, 1984, an opposition filed by Weber State on October 9, 1984, and Way/Utah's reply of October 23, 1984. Further, because Way/Odessa's petition for reconsideration of the staff's action raises the same issue, on our own motion we shall treat Way/Odessa's pleading as an application for review that will be consolidated in this proceeding. No other applications or pleadings were filed in connection with the Big Spring case.[2] We shall affirm the Bureau's decisions. However, there is one statement in one of the three Bureau rulings we wish to correct. See footnote 8 below.

3. We consider first the procedural issues raised by Weber State. It contends that no petition for reconsideration or stay of the grant of its application was filed, so that 40 days later the grant became effective under section 1.117(a) of the Rules. In the absence of the filing of such petitions, Weber State reasons that Way/Utah's petition is moot because the channel is now occupied and not available for application by Way/Utah. Weber State, in effect, asks us to interpret the rule so that Way/Utah would have no remedy, even if the staff had decided on reconsidera-

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[1] Call letters KWBR have been assigned to Weber State for the station.

[2] On March 26, 1985, the National Religious Broadcasters (NRB) filed comments in support of Way/Utah's application for review. While it maintained that the comments were inexcusably late-filed and should not be entertained herein, Weber State replied in opposition to the substantive arguments advanced by NRB. Notwithstanding the procedural irregularities cited by Weber State, we believe that, under the circumstances of this case, the public interest would be best served by our considering the arguments set forth in all of the pleadings before us.

tion that Way/Utah was correct on the merits. NRB argues that this "Catch - 22" position is untenable and submits that the Commission can set aside a grant of a permit if it is determined that a mutually exclusive application erroneously was excluded from consideration. To read the rule, as urged by Weber State, would deny Way/Utah of the right to a meaningful reconsideration of the staff action under section 405 of the Act, and we reject that interpretation. In these circumstances, once Way/Utah filed a timely petition for reconsideration, the grant of Weber State's application became subject to the outcome of any subsequent decision on that petition. Way/Utah's application for review, also timely filed, kept its rights alive. Weber State also argues that Way/Utah has failed to "specify with particularity" the matters requiring Commission review, as required by section 1.115 of the Commission's Rules. We disagree, and believe that enough specificity is presented to warrant our review of the issues raised. We therefore turn to the questions concerning the applicants' eligibility to operate on reserved channels.

4. Both channel 9, Ogden, and channel 14, Big Spring, are reserved for noncommercial, educational use under section 73.606. Channels so reserved are "intended to serve the educational and cultural broadcast needs of the entire community to which they are assigned. . . ." *Fostering Expanded Use of UHF Television Channels*, 2 F.C.C.2d 527, 542 (1965). Section 73.621 of the Rules sets out eligibility requirements for applicants seeking to use reserved channels. Subsection (a) of the rule provides in part that "noncommercial educational broadcast stations will be licensed only to nonprofit educational organizations upon a showing that the proposed stations will be used primarily to serve the educational needs of the community; for the advancement of educational programs; and to furnish a nonprofit and noncommercial television broadcast service." Subsection (c) provides that "noncommercial educational television broadcast stations may transmit educational, cultural and entertainment programs, and programs designed for use by schools and school systems in connection with regular school courses. . . ." Finally, subsection (e) provides that "[e]ach station shall furnish a nonprofit and noncommercial broadcast service."

5. FCC Form 340 elicits information relevant to a determination of an applicant's eligibility to operate on a reserved channel. These questions and requests for information will be discussed below in connection with Way/Utah's specific showing. We note at this point, however, that educational organizations seeking to operate on reserved television channels, but not on FM channels, are required to submit "evidence that officers, directors, and members of the governing board are broadly representative of the educational, cultural and civic groups in the

community."[3]

6. At the time we adopted our decision in *Moody Bible Institute*, 66 F.C.C.2d 162 (1977), we established processing standards for use by the staff in connection with eligibility requirements for reserved frequencies.[4] The processing standards were later published as Appendix A to the *Notice of Inquiry in Docket No. 78-164*, 43 Fed. Reg. 30842 (1978) (subsequently cited as *Eligibility)*.[5] Like the Form 340 these standards

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[3] See Question 10, FCC Form 340. We also note that we recently revised Form 340, *Revision of Application for Construction Permit (FCC Form 340)*, FCC 84-327, released July 20, 1984. In paragraph one of that decision, we stated that "we are changing neither substantive law, policy nor any underlying Commission requirement pertaining to the ultimate public interest finding." Although approved, the form is still awaiting printing and distribution, so that the version of the form used by the applicants here is still being used. Question 10 was inadvertently omitted from the revised form. The omission was inconsistent with our statement that no substantive changes were being made. We shall in due course correct the omission from the form. In the meantime, new television applicants will still be expected to provide this information, if they are educational organizations, in contrast to educational institutions. There is good reason for having a slightly higher standard for a noncommercial, educational television applicant than for an FM applicant, in light of the former's greater spectrum use. In that regard, all 20 reserved FM channels use spectrum that is equal to two-thirds of one television channel, television stations typically cover greater area than their FM counterparts, and fewer television than FM channels can be allocated in a given area.

[4] In that decision, Moody Bible Institute was granted authority to operate a noncommercial FM station as an educational institution. The Commission had not addressed the question before, so it determined that institutional applicants would be authorized thereafter only in communities where they operate a *bona fide* fulltime school. See footnote 5, below. If the rationale for authorizing a noncommercial station to educational institutions is that they will operate the station in connection with the school, then it makes sense to have a school available for that "connection." The "school-in-the-community" requirement applies equally to secular as well as religiously oriented schools.

[5] The standards are:

> *Institutional applicants:*
>
> "Institutional" applicants (i.e., those which operate a bona fide fulltime school) may qualify for noncommercial educational FM stations only in those communities where they operate a bona fide fulltime school. This is the case regardless of whether the school and its courses of instruction are religiously oriented or secular.
>
> *Organizational applicants:*
>
> Organizational applicants may qualify in any community. But, they must demonstrate that they have an educational goal and are committed to the advancement of an educational program.
>
> In considering whether organizational applicants have a suitable educational program, we will give primary weight to those programs which may properly be categorized as "instructional" or "general educational." The definitions of these terms are as follows:
>
> Instructional (I) includes all programs designed to be utilized by any level of educational institution in the regular instructional program of the institution. In-

differentiate between educational organizations and educational institutions. The different treatment accorded to educational institutions is based on the "expectation that any such station would operate in conjunction with the educational institution." *Id.* at 30843.

7. Principals of Way/Utah have applied over a period of time for a total of eight construction permits to operate on commercial channels.[6] There is, of course, no question as to the eligibility of the applicant to apply for commercial channels. In its application for a reserved channel, however, Way/Utah shows that one of its trustees is from Lexington,

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> school, in-service for teachers, and college credit courses are examples of instructional programs.
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> General educational (GEN) is an educational program for which no formal credit is given.
>
> We recognize the fact that noncommercial educational FM stations may present a wide variety of programming including such matters as light entertainment, gospel or popular music, and sports. Nevertheless, for the purpose of determining the applicant's qualifications, we must place principal emphasis on those programs, as defined above, which are clearly educational in nature.
>
> In determining whether a program may properly be categorized as "instructional" or "general educational," we will not disqualify any program simply because the subject matter of the teaching or instruction is religious in nature. While not all religious programs are educational in nature, it is clear that those programs which involve the teaching of matters relating to religion would qualify. In this regard, some programs will properly be considered to be both instructional and religious or both general educational and religious. As in all matters relating to programming, we will defer to the judgment of the broadcaster unless his categorization appears to be arbitrary or unreasonable.

Id. at 30844-45. Subsequent to their publication in *Eligibility*, the standards have been applied in cases such as: Lower *Cape Communications, Inc.*, 47 R.R.2d 1577 (1980); and *Florence Bridges*, 44 R.R.2d 667 (1978).

[6] Three applications — for channel 62, Lexington, Kentucky, channel 36, New Iberia, Louisiana, and channel 15, in Las Vegas, Nevada — have been designated for comparative hearing and are now pending. On September 23, 1983, the Review Board reversed the presiding officer's grant of the Lexington application, *FCB, Incorporated*, FCC 83R-75 (released October 6, 1983), but that decision is now on appeal. Principals of Way/Utah are also principals of the permittees of station KTFJ(TV), channel 36, Hutchinson, Kansas, station WOTC(TV), channel 29, Selma, Alabama, and of channel 18, Jackson, Michigan (no call letters yet assigned). Two other commercial applications - for channel 21, Mobile, Alabama and for channel 58, Dallas, Texas - were either returned or dismissed. An application for reserved channel 31, Mobile, Alabama, was returned for failure to establish the applicant's qualifications to operate on a noncommercial, educational channel. No petition for reconsideration or application for review of that action was taken; however, the same principals are now seeking assignment of the construction permit for station WMPV-TV, channel 21, Mobile. The composition of all of the above applicants and permittees varies, but either Mr. Edward Bowlds or Mr. Jerry Mulkey, both principals in Way/Utah, appear in the other entities. The proposals set out in the various applications are very similar.

Kentucky, one from Mission, South Dakota, one from Clearwater, Florida, and one, Mr. Henry Mohn, from Layton, Utah, a city about ten miles south of Ogden. All trustees are described as ministers or lay ministers. In response to the request for evidence that members of the Board of Trustees are "broadly representative of the educational, cultural, and civic groups of the community," the applicant responded: "All of the officers and members of the corporation come from different backgrounds and denominations with each taking an active part in the civic programs of the community."

8. Way/Utah checked the box in Form 340 indicating that it is an educational institution. In response to section II, question one, however, which asks the applicant to "describe in detail [its] character and legal nature," Way/Utah stated that it is a "religious nonprofit corporation formed for the purpose of operating a noncommercial educational broadcast station." No showing was submitted in the application, on reconsideration or on review to demonstrate that Way/Cross operates a "*bona fide* fulltime school" in the Ogden area. *Eligibility*, 43 Fed. Reg. at 30845. Consequently, it has not shown that it qualifies as an educational institution. In an effort to give full consideration to the application, the question becomes whether the applicant qualifies as an educational organization.

9. Question 2(b) of section II asks for a description as to "how the proposed station will be used for the advancement of an educational program." We are referred to Exhibit 1 of the application. In section IV of the application, Way/Utah refers us to Exhibit 1 at three other points: (1) in response to the request in question one for the "applicant's purpose and objective in establishing the proposed station and a statement of proposed program policies"; (2) in response to question two, which asks for "a proposed weekly schedule of programs" and which is accompanied by the statement that "such representation will constitute in part, the basis upon which the Commission acts on the application"; and (3) in response to question seven, which asks whether ascertainment information[7] has been placed in the applicant's local public inspection file. Exhibit 1, as originally submitted, states in its entirety:

> The proposed station will be used primarily to teach "religion" to its audience from the Bible.
>
> The applicant hopes to reach all different types of denominations with its broadcasting.

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[7] The Commission imposed specific ascertainment obligations on noncommercial, educational broadcasters in 1976. *Ascertainment of Community Problems,* 58 F.C.C.2d 526 (1976). Effective September 25, 1984, however, we abolished the specific ascertainment requirements. *Public Broadcasting Stations Programming and Reporting Requirements,* 56 R.R.2d 1157 (1984).

> The applicant proposes to use the "Bible" as its main teaching guide in the programmed religious format. Again, the main purpose will be to reach and teach people about the Gospel. [Quotation marks in original.]

10. On February 6, 1984, Way/Utah amended Exhibit 1 to include the following:

> The applicant will also have as a part of its regular programming format shows that deal with the American Indian. These programs will deal with Indian culture and will be taught by an American-Indian. These programs will be produced in the studios as well as on location at some of the Indian reservations. The applicant will also offer a course in broadcasting, with on the job training.

11. In response to question six of section IV, Way/Utah states that it will devote five to ten percent of a typical week to instructional programming in a typical broadcast week. Finally, Way/Utah believes that the following excerpt from its Articles of Incorporation is relevant:

> This corporation is organized exclusively for charitable, educational, religious, and scientific purposes as defined in section 501(c)(3) of the Internal Revenue Code of 1954 (or successor statute of similar import). Included within these purposes shall be the purchase [,] acquisition, construction, management, operation, and maintenance of a television broadcasting station; and all necessary related facilities equipment, and all other lawful purposes not inconsistent with the foregoing.

12. Before reaching the merits of the eligibility question, it is important to state what is not in issue. Religious entities are free to apply for, and become licensees of, broadcast stations on nonreserved channels, assuming they are willing to undertake the public interest obligations imposed on all broadcasters. Religious educational institutions are qualified to obtain licenses on reserved channels. Further, noncommercial, educational organizations, even though religiously oriented, can qualify upon an appropriate showing for licenses on reserved channels.[8] The programming provided by such licensees provides diversity preferred by many of our citizens. Nothing in this decision changes any eligibility requirement or tends to lessen the programming choices now available. We emphasize that what is in issue in this case is solely whether the applicant has shown that it is qualified to operate on a channel reserved for noncommercial, educational use.

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[8] It is this point we wish to make clear. Although not stated in the other Bureau rulings under review here, the Bureau stated on reconsideration of the Way/Utah proceeding, "Over the years, the Commission has articulated the principle that organizations which are primarily religious in nature, even though they have some educational aspects, will not be allowed to operate on channels reserved for educational use." This statement was clearly in error. We therefore, agree fully with NRB that "applicants for reserved channels may not be dismissed *simply* because they propose religious instructions." (Emphasis supplied.) Religiously oriented applicants for reserved television channels can meet the requisite eligibility standards. See, for example, the showing made by Faith That Pleases God Church, Inc., d/b/a Community Television of Caguas (BPET-821019KE).

13. Way/Utah's application shows that three of its trustees reside in areas far removed from Ogden. All the trustees share a common profession. Their participation in Ogden affairs, in the absence of any showing, appears to be minimal at best. Trustee Henry Mohn lives about ten miles from Ogden, but the only information we have about him is that he is a U.S. citizen and that he is a minister. We conclude that such scant information is insufficient to establish that the trustees of Way/Utah are "broadly representative of the educational, cultural and civic groups in the community." (Section II, question ten.)[9]

14. We have set out above the entire showing submitted by Way/Utah bearing on its qualifications as an educational organization. The fact that its Articles of Incorporation permit "charitable, educational, religious and scientific" activities tells us nothing as to which of these activities will, in fact, be pursued and to what degree. Thus, the Articles are not helpful in reaching a determination. Generally, the applicant states that "the main purpose will be to reach and teach people about the Gospel." However, Way/Utah has failed to submit a proposed "weekly schedule of programs," so we lack information as to the quantity and kinds of program categories to be broadcast in a typical week. Way/Utah has not identified any programming falling under the definition of "general educational." Instead, it states that it would devote five to ten percent of the programming in a typical broadcast week to instructional programming. As noted above in footnote five, instructional programming "includes all programs designed to be utilized by any level of educational institution in the regular instructional program of the institution. In-school, in-service for teachers, and college credit courses are examples of instructional programs." Because there is no showing that Way/Utah is an educational institution, any programs qualifying as "instructional" would have to be for the benefit of some other educational institution. However, the application is completely silent as to what school will use the instructional programs "in the regular institutional program of the institution."

15. The brief, amended showing states that "as a part of its regular program format" the applicant will present programs "that deal with the American Indian" and "offer a course in broadcasting."[10] Although the application does not so state, these programs appear to fall in the category of "general educational" programs. We are not told, however,

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[9] The processing standards set out in *Eligibility* above, were designed to aid in the definition of a qualified nonprofit, educational organization or educational institution. Those standards did not delete other specific requirements, including the information called for by question 10, section II.

[10] The fact that Way/Utah will offer on-the-job training does not distinguish it from any other broadcaster, commercial or noncommercial, and such training has never been considered as a factor in determining an applicant's eligibility to operate on a reserved channel.

how long the proposed programs are and how many times per week or month they will be broadcast — information that would be available if the applicant had provided the weekly schedule of programs called for by the application. Looking at the application as a whole, and lacking any specificity as to the extent of the "general educational" programs offered, we cannot determine that the proposed station "will be used *primarily* to serve the educational needs of the community; for the advancement of educational programs; and to further a nonprofit and noncommercial television broadcast service." Section 73.621(a), emphasis added.[11] Moreover, we believe that conclusion is fully consistent with the processing standards set out in *Eligibility,* above.

16. Way/Utah did not seek to supplement its showing on reconsideration or now on review. In any case, the time for filing amendments as a matter of right has long since passed. *See* 47 C.F.R. §73.3522. Weber State, the remaining applicant, established its eligibility at the outset to operate a noncommercial station on reserved channel 9, Ogden. Permitting Way/Utah to amend its showing at this time in an effort to establish its eligibility would be unfair to Weber State, would encourage piecemeal submissions and repeated processing,[12] and would delay the initiation of a new, noncommercial broadcast service to the public. In these circumstances, therefore, we do not believe that Way/Utah should be given an opportunity to amend its showing. In addition, Way/Utah has the burden of establishing its eligibility to operate on a reserved channel. Its failure to do so by not supplying the necessary information called for by our rules and procedures makes its application defective and subject to dismissal. In these circumstances, no hearing is required. *Bible Moravian Church, Inc.*, 28 F.C.C.2d 1 (1971). We therefore affirm the staff's action in dismissing Way/Utah's application.

17. The factual material in Way/Odessa's application differs only slightly from the material submitted in Way/Utah's application. Way/Odessa has four trustees, all of whom list their principal profession or

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[11] Way/Utah seems to suggest that our decision in *Lower Cape Communications, Inc.*, above, supports a grant of its application. It errs in this suggestion. In *Lower Cape*, we expressly found that the amount of educational and instructional programming proposed was consistent with section 73.503, the FM counterpart to television's section 73.621. *Lower Cape* found, as the rule clearly suggests, that an educational organization will not be denied a license solely because it lacks accreditation from a state organization. We raise no issue with regard to Way/Utah or Way/Odessa as to the presence or absence of accreditation.

[12] Given the interests of the public and Weber State, we believe that the statement of the court in *Colorado Radio Corp. v. F.C.C.*, 118 F.2d 24, 26 (D.C. Cir. 1941), although made in a different context, is applicable to this case: "We cannot allow the appellant to sit back and hope that a decision will be in its favor, and, when it isn't, to parry with an offer of more evidence. No judging process in any branch of government could operate efficiently or accurately if such a procedure were followed."

occupation as "management."[13] One of the trustees, Ms. Angie Bunick, lives in Midland, Texas, which is about 37 miles from Big Spring, the proposed city of license. The remaining trustees reside in cities considerable distances from Big Spring, the closest being Ft. Worth, which is about 230 miles away. Thus, the applicant has failed to show, as required by section II, question ten, that its governing board is "broadly representative of the educational, cultural and civic groups of the community." In paragraph ten, above, we set out an amendment to Exhibit 1 of Way/Utah's application. That amendment is not on file in the Way/Odessa case as to its otherwise identical Exhibit 1. Instead, after its application had been dismissed, the applicant stated, in relevant part, in a letter dated April 23, 1984, that it "will have as a large part of its regular daily programming programs on History, Culture, Broadcasting, and Religion, as well as programs for children." Although its showing lists a greater number of programs apparently falling within the "general educational" category, the absence of the proposed weekly program schedule still makes it impossible to determine the extent of the proposed programming relative to the broadcast week and, therefore, whether the proposed station "will be used primarily to serve the educational needs of the community," within the meaning of section 73.621(a) of the Commission's Rules.

18. We are compelled to conclude, therefore, that Way/Odessa has failed to establish its eligibility to operate on a reserved channel and that the staff was correct in dismissing its application. There are no competing applications in this case, so that Way/Odessa can refile for the channel if it believes it can change its showing so as to conform to the Commission requirements outlined above.

19. In addition to urging, unsuccessfully, that its application meets Commission requirements, Way/Utah also challenges the requirements themselves.[14] As noted in paragraph two, above, Weber State alleged that the application for review lacked specificity. Although that petition has some support, we believe that a fair reading of Way/Utah's pleading raises essentially the following arguments: (1) that the concepts of religion and education overlap and that the two concepts cannot be segregated for eligibility purposes;[15] (2) that the Commission ought to

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[13] Mr. Jerry Mulkey, who is trustee of both applicants, somewhat inconsistently describes his principal profession here as "management," and as "lay minister" in the Way/Utah application. We shall assume, for the purposes of discussion, that he is "principally" engaged in both occupations.

[14] Way/Utah's pleading encompasses all of the contentions raised in Way/Odessa's petition for reconsideration. The latter's pleading, therefore, will not be separately discussed.

[15] In the same vein, NRB argues that the term "education" should be interpreted broadly, encompassing "all fields of learning, including the subject of religion."

have different eligibility standards,[16] presumably to permit primarily religious operation on reserved channels; (3) that the Commission's present standards conflict with the free exercise provision of the first amendment; and (4) that FM and television applicants for reserved channels receive disparate treatment. We do not believe these contentions to be persuasive for the reasons that follow.

20. In our judgment, these arguments do not require extended discussion. The statute grants us authority to prescribe "the nature of the service to be rendered by each class of station." 47 U.S.C. §303(b). *See also Gross v. F.C.C.*, 480 F.2d 1288 (2d Cir. 1973) and *Lafayette Radio Electronics Corp. v. United States*, 345 F.2d 278 (2d Cir. 1965). We believe the showing called for by our application form and procedures to establish eligibility to use reserved channels falls within that statutory authority. As previously indicated, the showing required is designed to permit the Commission from the totality of the information before it to make an eligibility determination in cases where an applicant proposes general educational programming, but is not affiliated with an educational institution in the community. Moreover, we note that no basis would exist for making any classifications as to eligibility to operate on reserved channels if Way/Utah were successful in its argument that the Commission is constitutionally prohibited from making such determinations. The denial of a license on public interest grounds is not a violation of the free exercise clause of the first amendment. See *King's Garden, Inc. v. F.C.C.*, 498 F.2d 51 (D.C. Cir.), *cert. denied*, 419 U.S. 996 (1974). With regard to the alleged disparate treatment accorded FM and TV applicants. Way/Utah fails to distinguish cases dealing with educational institutions from those dealing with educational organizations. Secondly, it fails to distinguish between FM and television cases, and the two have, as noted above, different showings to make. The alleged disparate treatment is explained when these distinctions are considered.

21. Accordingly, IT IS ORDERED, That the application for review filed by Way of the Cross of Utah, Inc., IS DENIED.

22. IT IS FURTHER ORDERED, That the petition for reconsideration filed by Way of the Cross of Odessa, Inc., when considered as an application for review, IS DENIED.

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[16] Way/Utah quotes extensively from the concurring statement in *Moody Bible Institute of Chicago*, 66 F.C.C.2d 162, 163-68 (1977) (Commissioner White concurring), in support of this argument. As Way/Utah recognizes, concurring opinions do not represent Commission positions. Moreover, the facts of this case do not support many of the concerns expressed there.

23. IT IS FURTHER ORDERED, That the Chief, Mass Media Bureau, shall mail copies of this decision by certified mail, return receipt requested, to the parties to this proceeding.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*